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ABSTRACT

This is the first of four planned publications based on the results of a national survey concerned with furthering understanding of enrollees in junior college occupational programs. The primary sources of data were approximately 5,000 students in vocational technical programs at 60 different public, community-junior colleges. Questionnaire data were gathered on students' personal and background characteristics, experiences, and perceptions. Where possible and meaningful, the findings were compared with those reported on other groups of student. In addition to contributing to the limited data pool on junior college vocational students, the study offers recommendations pertaining to the following areas: (1) increasing the extent to which post-secondary occupational education will have broader societal exposure, a more positive evaluation, and greater student accessibility, (2) the vital role played by guidance and counseling personnel, (3) the danger of applying stereotypical definitions to vocational students, (4) need for broader training programs, and (5) directions for future research. (Author/JS)

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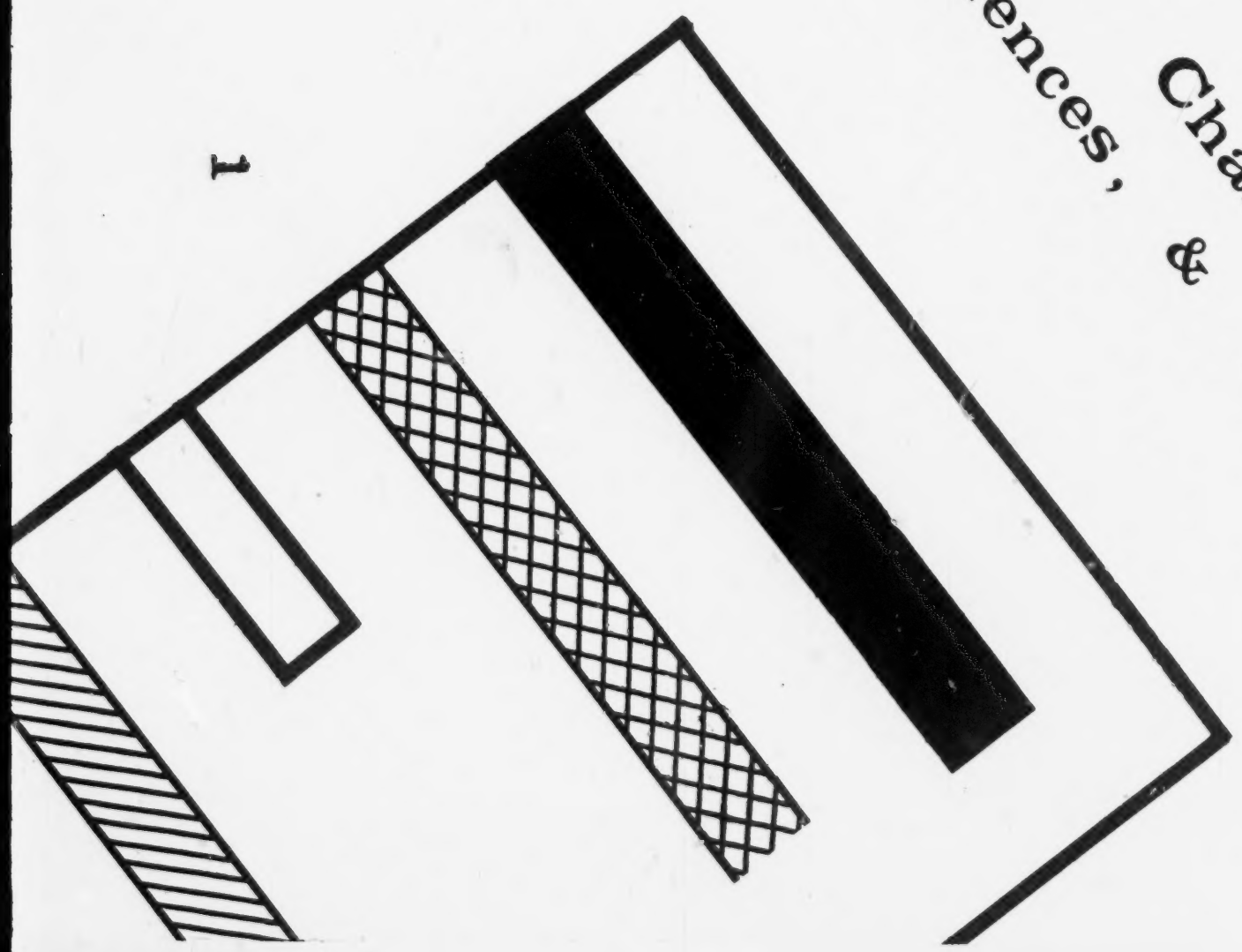

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY

RESEARCH AND DEVELOPMENT SERIES NO. 53

COMMUNITY-JUNIOR COLLEGE STUDENTS ENROLLED IN OCCUPATIONAL PROGRAMS: SELECTED CHARACTERISTICS, EXPERIENCES, AND PERCEPTIONS

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PREFACE

Within the next few years, a substantial proportion of American workers will be required to have at least some post-secondary occupational training. Vocational-technical education programs on the public, community-junior college level will increasingly play a more significant role in this regard. Intelligent planning must give consideration to making the educational experiences of students as rewarding as possible. This cannot be realized unless pertinent data on the characteristics and experiences of students are available.

This publication contains the results of a national survey concerned with furthering understanding of enrollees in junior college occupational programs. It is an important addition to the limited body of relevant literature presently existent because of the scope of its sample and the diversity of information which was collected. Additionally, it is one of the first extensive investigations which controls for the occupational service area of the respondent, as well as a variety of other variables.

Initially, we would like to thank those students and staff members, associated with 60 different community-junior colleges throughout the country, whose willingness to expend both time and effort contributed immeasureably to the fruition of this research. The cooperation and interest shown by school personnel in this research project is especially gratifying and greatly appreciated.

The authors of this publication, A. P. Garbin (formerly Specialist in Occupational Sociology at The Center and now at The University of Georgia) and Derrald W. Vaughn (formerly Research Associate at The Center and now at The University of Colorado) warrant recognition for designing, executing, analyzing, and reporting this research. Computer Center personnel at The Ohio State University are to be acknowledged for their assistance in processing the data. During the initial planning stage of the project, Aaron J. Miller, Coordinator in Leadership and Development, The Center, is to be credited for his helpful suggestions. The critical review and editorial comments of Edward J. Morrison, Research Coordinator, The Center, and Angelo C. Gillie, Associate Professor, The Pennsylvania State University, were instrumental in enhancing the overall quality of the report.

Robert E. Taylor
Director
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and Technical Education

ABSTRACT

The results of this study pertain to three broad areas as suggested by these questions:

(1) What kind of student enrolls in public, community-junior college vocational-technical programs?

(2) What are the similarities and differences between junior college occupational students and enrollees in other post-secondary institutions and programs?

(3) What implications do the findings have for educational planning and development?

The primary sources of data were approximately 5,000 students in vocational-technical programs, at 60 different public, community-junior colleges, located throughout the United States. Information was obtained from a predominantly highly structured questionnaire, which was group administered by college personnel in the classroom situation. The report provides information on the following subjects: structural (e.g., age, sex, race, and marital status) and sociopsychological (self-esteem and success orientation) characteristics; educational background and experiences (e.g., high school grades, high school extracurricular activities, and vocational-technical courses in high school); socioeconomic background; parental interest and influence; community background and future community orientation; immediate post-high school experience; factors associated with junior college selection and program selection; main source of financial support; adequacy of training program; and relationship of job to program of study. Frequently, the response distributions are not only presented for the total sample, but also according to significant subgroups of the sample (e.g., vocational-technical service area, sex, race, socioeconomic status, geographic area, etc.).

Where possible and meaningful, the findings were compared with those reported on other groups of students. Comparative data were presented involving the following variables: sex distribution, success orientation, high school grades, encouragement of father to attend college, most important goal in attending college, and evaluation of occupational training.

In addition to contributing to the limited data pool on junior college vocational students, a central objective of the study was to offer recommendations which seem to have particular relevance

for facilitating educational planning. They in part relate to the following areas: increasing the extent to which post-secondary occupational education will have broader societal exposure, a more positive evaluation, and greater student accessibility; the vital role played by guidance and counseling personnel; the danger of applying stereotypical definitions to vocational students; need for broader training programs; and directions for future research.

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COMMUNITY-JUNIOR COLLEGE STUDENTS ENROLLED IN OCCUPATIONAL PROGRAMS: SELECTED CHARACTERISTICS, EXPERIENCES, AND PERCEPTIONS

I. INTRODUCTION

This report, based on a national survey of community-junior college students[1] enrolled in occupational programs, is essentially a descriptive analysis of the students' personal and background characteristics, experiences, and perceptions which are likely to have implications for curricula and program planning.

The beginning section of this report discusses the need and growth of post-secondary vocational-technical education. This is followed by a related consideration of the junior or community college, with particular attention given to the occupational segment of the junior college educational enterprise. The next major section addresses itself to the following subjects: (1) the importance of descriptive student data for educational planning; and (2) the paucity of available information on junior college occupational students. The next portion of this chapter examines the nature of the research project, including comments on the problem statement, the purposes of the study, and the research objectives. The final topical breakdown contains an overview of the report.

POST-SECONDARY SCHOOL OCCUPATIONAL EDUCATION: ITS GROWING SIGNIFICANCE

According to the Vocational Education Amendments of 1968 (United States 90th Congress, 1968), opportunities for vocational education should be provided so that all persons " . . . will have ready access to vocational training or retraining which is of high quality, which is realistic in light of actual or anticipated opportunities of gainful employment, and which is suited to their needs, interests, and ability to benefit from such training." It is evident that a major discrepancy exists between available opportunities and individual needs. As Burkett (1969: 2) wrote,

---

[1]Throughout this manuscript the respondents will also be referred to as community college students and junior college students.

" . . . a minimum of 17 million people need access to vocational education in addition to the nine million now in such programs." Another writer (Koble, 1969: 5) noted that about 60 percent of the students leave secondary schools inadequately prepared to enter the work world. This gap between opportunities and needs is being created primarily by the major changes occurring in our occupational structure.[2]

Table 1.1 reveals the actual and projected employment figures for 1968 and 1980, respectively, and the anticipated changes for the period. The occupational structure is undergoing two basic quantitative and qualitative changes: (1) the addition of numerous new jobs which necessitates advanced training and skills; and (2) the elimination of many unskilled and semiskilled occupations. It is apparent these trends will continue at an accelerating rate for several years. The new and everchanging technology, epitomized by automation and the flow process industries, will increasingly require more workers with greater knowledge and extensive skills. In fact, it has been predicted that four million workers will be required to occupy work positions previously nonexistent (Ruttenberg, 1969: 6) and two million jobs will be eliminated during the decade following 1965 (Johnson, 1969: 249).

In order to illustrate the critical lack of trained manpower in certain areas, the technician has been selected as a case in point. It has been estimated (Russo, 1969: 10) that for each scientist and engineer, there should be about two technicians. If the United States were to achieve this ratio by 1975, it would need about three million more than the expected number of technicians which will be available (Bowen, 1969: 42).

Although the statement " . . . that much, if not nearly all, of the occupational education of the future will have to be conducted at post-high school levels," (Harris, 1966: 60) is probably an exaggeration,[3] it is evident that post-high occupational education is more significant than ever before. There is no doubt that many new and/or advanced levels of work skills required for effective job participation in the future must be met by post-secondary vocational programs.

---

[2]A detailed examination of the principle social-cultural forces affecting the occupational structure has been made in a previous publication (Garbin, *et al.*, 1970: 5-11).

[3]To the contrary, there will likely be many jobs for which appropriate high school education will be sufficient. For example, a decade from now, it is expected that more than 15 million operatives and more than 17 million clerical jobs will be available (see Table 1.1).

TABLE 1.1

ACTUAL AND PROJECTED EMPLOYMENT AND EMPLOYMENT CHANGE, BY MAJOR OCCUPATIONAL GROUPS, 1968 AND 1980*

Major Occupational Group	Employment (millions) 1968	1980	Percent Change (1968-1980)
Professional and technical	10.3	15.5	50
Service workers, except private household	7.7	11.1	45
Clerical workers	12.8	17.3	35
Sales workers	4.6	6.0	30
Managers, officials, proprietors	7.8	9.5	22
Craftmen and foremen	10.0	12.2	22
Private household workers	1.7	2.0	15
Operatives	14.0	15.4	10
Nonfarm laborers	3.6	3.5	-2
Farm workers	3.5	2.6	-33
ALL OCCUPATIONS	75.9	95.1	26

*(U.S. Department of Labor, 1970)

In recent years significant resources have been allocated on the federal, state, and local levels for the purpose of making occupational training available to a greater number of Americans. The impact of these resources, as measured by recent enrollment changes in vocational-technical education classes, can be assessed by examining Table 1.2.

Irrespective of population group, the number of students participating in federally assisted occupational education programs increased by about one-fifth during the 1966-69 period. It has

TABLE 1.2

ACTUAL AND PROJECTED ENROLLMENTS IN VOCATIONAL-TECHNICAL EDUCATION CLASSES, BY POPULATION GROUP, FISCAL YEARS 1966, 1969, 1970, AND 1975*

Population Group	Enrollment				Percent Change	
	1966	1969	1970	1975	1966-1969	1969-1975
Secondary	3,048,248	4,079,395	5,000,000	5,500,000	25	26
Post-Secondary	442,097	706,085	850,000	1,250,000	37	44
Adult	2,530,712	3,050,466	4,189,500	6,500,000	17	53
Special Needs	49,002	143,420	600,000	750,000	66	81
TOTAL	6,070,059	7,979,366	10,639,500	14,000,000	21	43

*1966 enrollment (cited in Garbin, 1969: 13)
1969 enrollment (cited in Miller and Gillie, 1970: 6)
1970 and 1975 projected enrollments (Russo, 1969: 11)

been projected that the vocational-technical education enrollment in high schools, post-high schools, and adult levels will reach 14 million by 1975. Post-secondary enrollees increased by slightly more than one-third between 1966 and 1969. This student group is expected to increase at a still greater rate in the immediate future, totalling about 1,250,000 by 1975. Only the percentage increase experienced by the "special needs" programs exceeded--or will surpass--that of the post-secondary level. Notwithstanding, for 1967 the mean national enrollment of post-high occupational students was 4.79 percent of the 18-21 year age group (Garbin, 1969: 9). One year later, the mean national enrollment of post-high occupational students was 4.1 percent of the 20-24 year age group (Miller and Gillie, 1970: 3-4). The mean enrollment for 1968 (20-24 year age group) ranges from 0.3 percent in New Jersey to 15.7 percent in Florida. Apparently, considerable accessibility variation is characteristic of potential post-high school students among the various states.

GROWTH IN NUMBER AND ENROLLMENT OF COMMUNITY-JUNIOR COLLEGES

Post-high school occupational education is offered by several different types of institutions, under a variety of conditions, and for a number of objectives. Vocational-technical education on the post-secondary level is provided by such sources as the following: community or junior colleges, four-year colleges and universities, area schools, technical institutes, comprehensive high schools, business and industry, proprietary schools, correctional institutions, organized labor, and the military services.[4] It is expected that each of these occupational training sources will contribute toward the post-high job preparation of societal members in the years ahead. However, the community-junior college will undoubtedly make the most significant quantitative contribution.

During recent years, the public junior college[5] has been the fastest growing segment of American higher education (Gleazer,

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[4]Excellent accounts examining post-secondary occupational education may be found in Swanson and Kramer (1965) and Venn (1964).

[5]There are two other general categories of junior colleges according to type of sponsorship--church-related and independent. Trend data regarding the number of such institutions and their enrollments are not presented because the research problem examined in this report is limited to public institutions. Public schools enroll 90 percent of all junior college students (*U.S. News and World Report*, May 5, 1969).

1968-1969). Two figures have been prepared to summarize this growth for the United States as a whole.

Figure I-1 depicts the growth in number of public two-year colleges from 1961 to 1970. With one exception (1962-63), the number of public junior colleges during the decade has been increasing from year to year. This has been particularly the case during the more recent five-year period when the number of colleges increased by 282. The 739 colleges reported for 1968 represent an increment of 91 over the number in existence the previous year, the largest one-year period of growth. Since then, the number of colleges has been increasing at a decreasing rate.

After considering the discussion of the previous paragraph, the enrollment trend portrayed by Figure I-2 is not surprising. During the past decade, the number of public two-year college enrollees has increased by more than 1.7 million. For each of the nine one-year intervals, the increase in enrollment exceeded 10 percent. The year following 1968 witnessed the greatest increase in students (nearly 300,000).

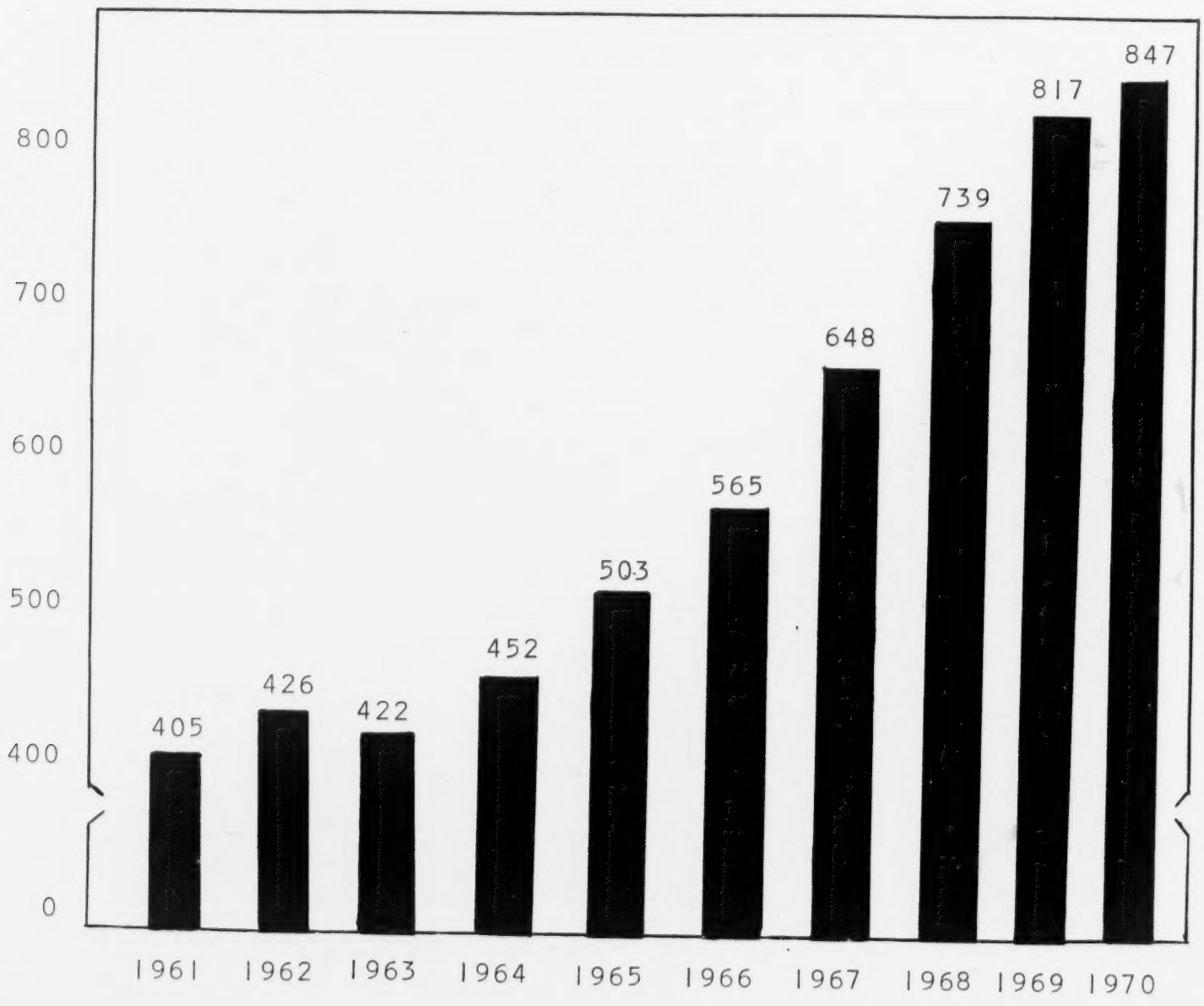
The relative significance played by junior colleges in the higher educational process can be appreciated more by noting that an average of one out of three college students presently begin their higher education in junior colleges (Gleazer, 1968-69: 12). It has been estimated by some authorities that one-half of the nation's college population will be enrolled in community colleges in the 1970's (Gillie, 1969: 16).

It should be mentioned that community-junior colleges offer three basic types of programs: transfer, occupational (vocational-technical), and evening (adult). The enrollment figures presented in Figure I-2 pertain to public junior college students, irrespective of program concentration; the research findings revealed in the present publication have direct applicability only to occupationally-oriented students.

About one-third of all students who enter two-year colleges are enrolled in occupational programs (Gleazer, 1968-1969: 13). The proportion of students majoring in vocational-technical education at any given school varies considerably from one school to another. Almost without exception, however, junior colleges deviate greatly from what has been described as " . . . a truly comprehensive institution: about 70 percent vocational-technical and 30 percent transfer" (*Changing Times*, 1968: 37). As would be expected, states also differ significantly as to the percent of junior college students pursuing occupational programs. States which have favorable proportions of their post-secondary students

FIGURE I-I

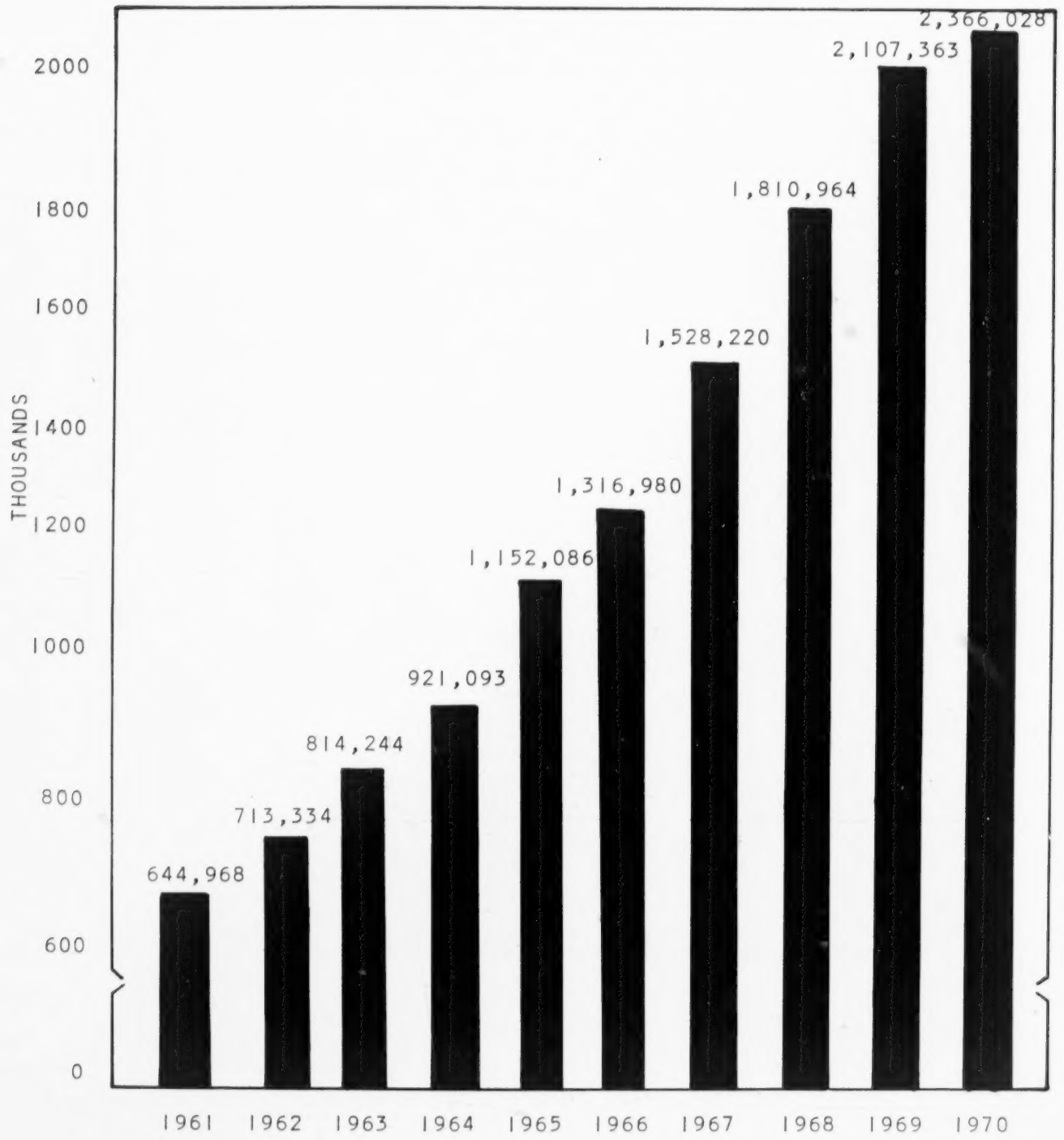
GROWTH IN NUMBER OF PUBLIC TWO-YEAR COLLEGES, UNITED STATES AND OUTLYING AREAS, 1961 TO 1970*



*This figure is based on information provided in the *1969 Junior College Directory* (American Association of Junior Colleges, 1969) and the *1971 Junior College Directory* (American Association of Junior Colleges, 1971).

FIGURE I-2

GROWTH IN ENROLLMENT OF PUBLIC TWO-YEAR COLLEGES, UNITED STATES AND OUTLYING AREAS, 1961 TO 1970*



*This figure is based on information provided in the *1969 Junior College Directory* (American Association of Junior Colleges, 1969) and the *1971 Junior College Directory* (American Association of Junior Colleges, 1971).

enrolled in occupational programs include California (40 percent), Pennsylvania (42 percent), and Hawaii (70 percent), (Gillie, 1969: 171).[6]

RELEVANCE AND NEED FOR DESCRIPTIVE DATA ON JUNIOR COLLEGE OCCUPATIONAL STUDENTS

In the words of Whitfield (1969: 282), the " . . . growing emphasis on the two-year institution has not . . . been accompanied by an appropriate increase in research pertaining to the students who choose to attend one." Reynolds (1965: 45) wrote " . . . there is a dearth of authoritative information about junior college students . . . . " Referring to junior college students, another writer (Bossone, 1965: 279) indicated the following: "Aside from the usual statistics set forth in textbooks and articles about the student's age, sex, marital status, socioeconomic background, and academic aptitude, very little seems to be known about him." These statements are particularly true for important subgroups of the junior college population, such as students enrolled in vocational curricula. Following an excellent synthesis of past research on the characteristics of junior college students, K. Patricia Cross (1968) concluded that very little is known about junior college occupational students.[7]

A recent statewide investigation in California (Peterson, 1965) also attests to the need and importance of research on junior college students. Sixty-five out of 77 public colleges responded to a questionnaire which sought to identify the most critical research needs in the junior college area. A listing of 26 research problems was derived; research on "student characteristics" ranked sixth.[8]

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[6]These percentages are not exactly comparable because they are based on different indicators; however, they do constitute gross measures of comparability. The high percentage for Hawaii partially reflects the fact that all but one of its junior colleges were formerly post-secondary technical schools.

[7]In a more recent publication, Cross also briefly summarized research findings pertaining to junior college occupational students. Using her words: "Although the research is scanty, a synthesis of scattered bits of data may help to construct a tentative description of the characteristics of the occupationally-oriented student" (Cross, 1970).

[8]The following research needs were ranked, respectively, one through five: (1) effectiveness and improvement of instruction; (2) promotion and dissemination of research and development; (3) student dropouts; (4) evaluation of instructional offerings; and (5) financial support.

It is evident from the previous paragraphs that the need for additional descriptive data on junior college students, especially those enrolled in vocational programs, is commonly recognized. This is not to suggest that no research has been conducted which focuses on this student group.[9] To our knowledge, however, the literature contains no major study which has examined an extensive sample of junior college occupational students, classified as to service area, in terms of a variety of demographic and sociological variables. This is understandable, since prior to the Vocational Education Act of 1963, only limited federal funds were used for the support of vocational education at the post-secondary level; therefore, the number of schools and students were limited. Even with the advent of the Vocational Education Act of 1963, very little of the funds went to post-secondary endeavors, which resulted in one of the modifications evident in the Vocational Amendments of 1968 mandating that a specific amount of money be allocated for that purpose. As specified earlier, however, the number of community-junior colleges and students has been increasing at an accelerating rate, and there is every indication this trend will continue. If future educational planning is to be realistic and congruent with the needs of students, the developments with reference to admission policies, counseling, curriculum, and instruction must be pursued, keeping in mind the pertinent characteristics of students most likely to be involved in this educational experience. By presenting data from a national sample of students enrolled in occupational programs of selected community-junior colleges throughout the country, the present study should be of interest to administrators, teachers, and counselors.

THE STUDY: PROBLEMS AND OBJECTIVES

The central concerns of this study are twofold: (1) to describe a national sample of junior college vocational students as to pertinent social and personal characteristics; and (2) to discuss the implications of these data for educational planning and development.

It is apparent that junior colleges will increasingly assume the major responsibility for post-high vocational-technical education. If junior colleges are to make this educational experience more rewarding to the student, it is relevant that student descriptive data be made available so that more effective program and curricula planning can be realized. One of the principle objectives of this report is to contribute to the data pool in this area.

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[9] In addition to Cross (1970), the reader may consult a publication prepared by Roueche (1967) for studies relevant to this area.

Another key objective is to consider the implications of the student data. In an effort to add greater dimensions to the interpretations, comparative data from other student subsamples will be presented and discussed. Inclusion of comparative data should facilitate the development of recommendations which, if implemented, would hopefully result in enhancing the quality of occupational education on the community-junior college level, and in some cases, serve as sources of inducement encouraging other would-be occupational students to matriculate in programs of this nature.

Nobody doubts the fact that junior college student populations are changing rapidly. Investigations on the characteristics of junior college students should, therefore, be a continuing effort, particularly on the local level. With this in mind, another objective of this report is to provide guidelines and research ideas which may be helpful to future researches.

THE REPORT: AN OVERVIEW

Following this introductory chapter, the report is divided into seven chapters. Chapter II contains material relevant to understanding the steps taken in planning and conducting the research. The basic topics discussed include the (1) identification and selection of sample, (2) data gathering instrument, and (3) questionnaire administration.

Chapter III presents data on selected personal characteristics of the sample members. Demographic variables which are discussed include sex, age, race, marital status, and religion. In addition, descriptions regarding certain social-psychological factors (i.e., self-esteem and success orientation) are also presented.

The educational background and experiences of the occupationally-oriented community-junior college students are examined in Chapter IV. Discussions pertain to such topics as the type of secondary school from which the respondent graduated, the nature and quantity of the high school vocational-technical courses pursued by the respondent, his high school grades, the courses which he enjoyed most, and the extracurricular activities pursued as a high school student.

Chapter V presents findings pertinent to three major subjects as they relate to the students: (1) socioeconomic background; (2) parental interest and influence; and (3) community background as well as future community orientation.

Data are reported in Chapter VI which should provide insight relevant to understanding the transition from high school to junior college. Initially, data are indicated regarding the sample

members' immediate post-high school experience. Next, findings are disclosed pertaining to the factors associated with junior college selection. Additionally, a discussion follows which pertains to those factors associated with occupational program selection.

In Chapter VII various facets of the educational status and work experience of the students are examined. Such matters as the main sources of support while in college and evaluations of the occupational programs are presented.

Chapter VIII presents a synthesis and summary of data, and the derived conclusions. The basic concerns of the final chapter are limited to these topics: from high school to junior college; democratization of higher education; Negro participation; occupational service area comparisons; residential proximity and community college attendance; implications of geographical mobility for occupational education; and study limitations.

II. METHODOLOGY AND STUDY GROUPS

This chapter examines various topics pertinent to understanding the design and execution of the study. First, a brief summary is made concerning the basic orientation of the research design. Second, a detailed review is given the questionnaire used in data collection. Third, the sampling procedures are outlined. Fourth, discussions are centered around the steps followed in administering the questionnaire and processing the data. Fifth, a few comments are offered relative to the preliminary and actual samples.

BASIC ORIENTATION OF RESEARCH DESIGN

Succinctly stated, the major purpose of the present investigation is to portray as accurately as possible the characteristics of a national sample of occupational students enrolled in community-junior colleges. The major consideration behind the selection of the research design was not primarily that of testing causal hypotheses which would permit inferences about causality. Instead, a major consideration was descriptive accuracy. Therefore, a design was used which was thought to minimize bias and maximize the validity of description. In a word, the basic orientation of the research design is "descriptive" rather than "analytical." This does not mean that conclusions cannot be drawn concerning relationships which appear in the data but that the procedure does not permit, strictly speaking, explication of the causal bases of those relationships.

DATA GATHERING INSTRUMENT

Since no previous study on junior college vocational students exists which is extensive in scope and/or based on a national sample, it was decided these two factors be requirements of the present research design. Furthermore, economic consideration made the mailed questionnaire the only feasible data gathering technique.

A number of matters were considered during the questionnaire development phase. It was of foremost importance that the questionnaire items actually obtain the information needed to answer the research questions. This meant the items had to meet the following criteria: (1) be relevant to the research purposes; (2) solicit information which the respondent possessed; and (3) be

stated in such a manner that they would be understood uniformly. Other considerations revolved around matters pertaining to "interest" and "alienation"; these were important from the standpoint of both individual item selection and overall questionnaire construction. Loss of cooperation from boredom would be as damaging to validity as the loss which might be incurred from items defined as offensive by the respondents.

The instrument development was initiated with a short list of broad general areas to which it was felt the research results should be relevant (e.g., program design, guidance, and administration). In addition, a narrower set of specific objectives and research questions were outlined. By looking at the specific question areas developmentally, that is, by exploring past development, present status, and anticipated future course, it was possible to construct a "question area matrix" (e.g., occupational and educational aspirations and expectations, job attribute preferences, and life values and goals). When examined developmentally, it became clear that several possible spheres of influence needed exploration; for example, sex, age, race, and marital status were obviously relevant personal variables. At another level, parental, peer, and school influences were considered important. On still a third level, socioeconomic status, rural-urban environment, and religion were thought to be relevant. In addition, such experiential and psychological factors as level of self-esteem, birth order, attitude toward work, academic ability, specific school experience, job experience, and knowledge of possible occupations are examples of other variables defined worthy of exploration. Within the limits of reasonable questionnaire length, the cells resulting from the factorial combination of influence factors and question areas were explored for question possibilities.

The item pool used to construct the questionnaire was derived from a variety of sources. A number of survey instruments previously used to gather data from other types of student subgroups were examined for items. In several instances, specific items were incorporated in the present study's research instrument. In a few instances, items belonging to a scale, for example Rosenberg's (1965) self-esteem scale, were used as a group or with a minor deletion or addition. In addition, the authors had to compose a large number of items to meet specific needs of the research effort.

A preliminary questionnaire was constructed, reproduced, and pretested on a sample of 20 vocational-technical students enrolled at a two-year technical institute in a nearby city. After responding to the questionnaire, the students were given the opportunity to voice their opinions and criticisms of the instrument. Central concerns at this time involved effort to make the questionnaire as clear and interesting as possible to the would-be respondent. Of course, most important was the requirement that the items actually

obtain the desired information. The pretest experience suggested certain modifications in the preliminary questionnaire were advisable. The questionnaire was subjected to a final revision and adapted for use with a machine-scored answer sheet. These final changes underwent limited pretesting on a number of underclass students at The Ohio State University. It was then reproduced in the version used to collect data for the present research project.

The questionnaire employed in the present study is divided into two major sections according to types of questions.[1] Section I contains 11 open-ended questions; most of these questions pertain to various facets of occupational aspirations-expectations.[2] Section II contains 161 multiple choice questions. This section is divided into the following designated subdivisions: "Background Information," "About Home and Parents," "Attitudes Toward Yourself," "Educational Training," "Your Relationships with Others," "Goal Related Attitudes and Values," "Educational Goals," and "Occupational Goals." IBM answer sheets were provided for the Section II responses. As ascertained by pretesting, the average time required to complete the questionnaire was 50 minutes.

SAMPLING PROCEDURE

The sampling procedure was designed to preserve as many of the major characteristics of a national sample of vocational-technical junior college students as possible. Following the admonition of Richards, Rand, and Rand (1965), it was of special concern that various geographic regions be sampled representatively. In addition, it was considered important that the vocational-technical service areas be sampled, representatively, within each geographical region. The necessary information about the overall population was obtained from the Seventh Edition of *American Junior Colleges* (Gleazer, 1967a).

Only public, community-junior colleges which offered occupational programs were considered for inclusion in the list of schools to be sampled; there were 492 schools which met these criteria. Two additional criteria reduced the number of individual schools in the universe to 417; the occupational and transfer programs had to be listed separately and the enrollments for the listed occupational courses presented. From this group of 417 schools,

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[1] A copy of the questionnaire and "Directions" for the respondent are included in Appendix A.

[2] Results to these questions are not reported in this publication. Data elicited by several other questions are also not presented in this report; they will provide the basis for subsequent publications.

interval sampling was used, whereby every third school on the list was identified and asked to participate in the study.[3]

Each school in the preliminary sample was contacted and invited to participate in the study.[4] Of the 139 schools contacted, 86 agreed to participate in the study. The courses offered by these 86 schools were tabulated and classified according to the service area[5] to which each belonged, as well as the geographic region[6] in which each school was located. Students

[3]Although the preliminary steps in the sampling procedures were of necessity pursued on the basis of "schools," "students" were the prime focus of the study and it was on students that final selection was made. Unless specified otherwise, subsequent use of the word "sample" refers to "student sample."

[4]Copies of the initial and follow-up letters are included in Appendix B.

[5]The seven service areas are: business and office, distributive education, health occupations, home economics, technical education, trade and industry, and vocational agriculture.

[6]The nine census regions of the United States, for which data are presented in this report, represent groups of states, as follows:

New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Middle Atlantic: New York, Pennsylvania, and New Jersey.

South Atlantic: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia.

East South Central: Alabama, Kentucky, Mississippi, and Tennessee.

East North Central: Illinois, Indiana, Michigan, Ohio, and Wisconsin.

West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

West South Central: Arkansas, Louisiana, Oklahoma, and Texas.

Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

Pacific: Alaska, California, Hawaii, Oregon, and Washington.

enrolled in these courses were then selected to participate in the study according to the method described below.

Of the 86 schools which agreed to cooperate in the study, and were the recipients of questionnaires, 60 completed and returned all or a portion of the questionnaires by the deadline for beginning data analysis. Four other schools returned completed questionnaires after the deadline; results from these questionnaires are not reported in this publication.

As indicated above, geographic subregions and vocational-technical service areas constituted major sampling criteria. It was established that these variables should reflect accurately the total national distribution. To insure the accomplishment of this goal the national proportions of the variables in question were determined by examining the data available on the 139 schools selected originally and then superimposed on the student population in the cooperating schools. Using 9,000 as the base figure (approximately 10 percent of the occupational student subpopulation in these schools), the proportions determined previously were converted to the actual number of subjects to be drawn from each geographical subregion and vocational-technical service area. The resulting sample sizes in four of the subregions were considered extremely limited and oversampling was deemed appropriate to insure regional representativeness. Using a list of courses and enrollments, classified by service area for each cooperating school within each subregion, the number of subjects selected from each school was approximately proportional to that school's contribution to the subregion's total. Discounting oversampling in the four previously identified subregions, the proportions of the sample as finally selected tended to match the regional proportions of the overall population (see Figure II-1).

A word about course classification into service areas should be included at this point. An exhaustive list of vocational-technical courses, categorized by vocational-technical service area, could not be located at the time of the determination of the sample. In fact, it was not possible to ascertain a list of clearcut criteria which would enable the researchers to make the classification themselves. Consequently, a list of the occupational courses offered by the cooperating schools was compiled and submitted for categorization to a panel of six specialists in vocational-technical education.[7] Given the course classification, the proportions were then determined nationally and regionally and used in sample selection as noted earlier.

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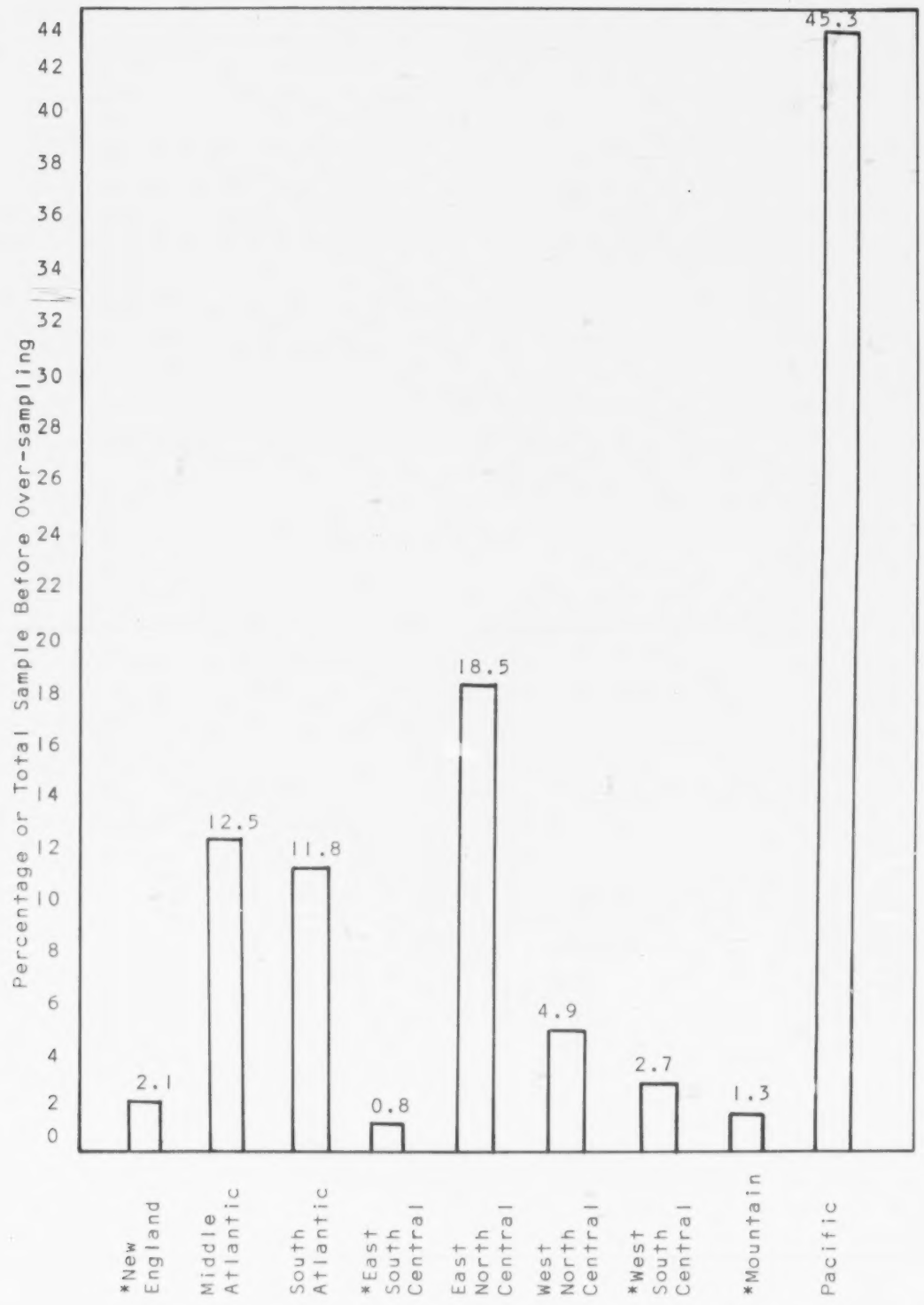
[7]At the time of membership on the panel, all were specialists in various areas of occupational education at The Center for Vocational and Technical Education, The Ohio State University. The

FIGURE II-1

PERCENTAGE REPRESENTATION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN PRELIMINARY SAMPLE, BY GEOGRAPHIC SUBREGION



*Refers to Census regions to be over-sampled: New England and West South Central by a factor of two; East South Central by a factor of five; and Mountain by a factor of three.

QUESTIONNAIRE ADMINISTRATION AND DATA PROCESSING

Letters sent to the administrative heads of the colleges in the preliminary sample included a request that a questionnaire administrator(s) be designated for each school.[8] Subsequently, all questionnaire materials were sent to the questionnaire administrators at the cooperating schools.

The questionnaire administrator was instructed to administer the questionnaire to the designated number of appropriate students (according to service area) in classroom situations. The procedures for actually administering the questionnaires were standardized across the total sample.[9]

Following administration, the questionnaire administrator placed the completed questionnaires in stamped pre-addressed packets and returned them by mail to the researchers.[10] The questionnaire administrator was paid 25 cents for each usable questionnaire.[11]

After the completed questionnaires were returned, the responses to the open-ended questions (Section I) were coded into response categories and marked on the answer sheet along with the subject-marked responses to Section II of the questionnaire. The answer sheets were then automatically processed and converted to data cards and finally to data tapes for computer analysis.

An IBM 360-75 was used to process the data. A version of the NUCROSS program was used to derive frequency and percentage distributions.

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help of Drs. C. J. Cotrell, J. W. Hensel, H. Huffman, S. Lee, A. J. Miller, and N. E. Vivian is gratefully acknowledged in this regard. See Appendix "C" for the instrument used to elicit categorization and the suggested classification. In the absence of unanimous agreement, plurality opinion prevailed. In a few cases, "ties" were broken in a manner suggested by the literature. In a few other instances, the absence of a plurality resulted in the course being excluded.

[8]See Appendix "D" for complete content of letter.

[9]See Appendix "D" for the questionnaire and administration procedure.

[10]Appendix "D" also contains enclosures which explain how this was to be accomplished.

[11]The letter which accompanied payment may be found in Appendix "E."

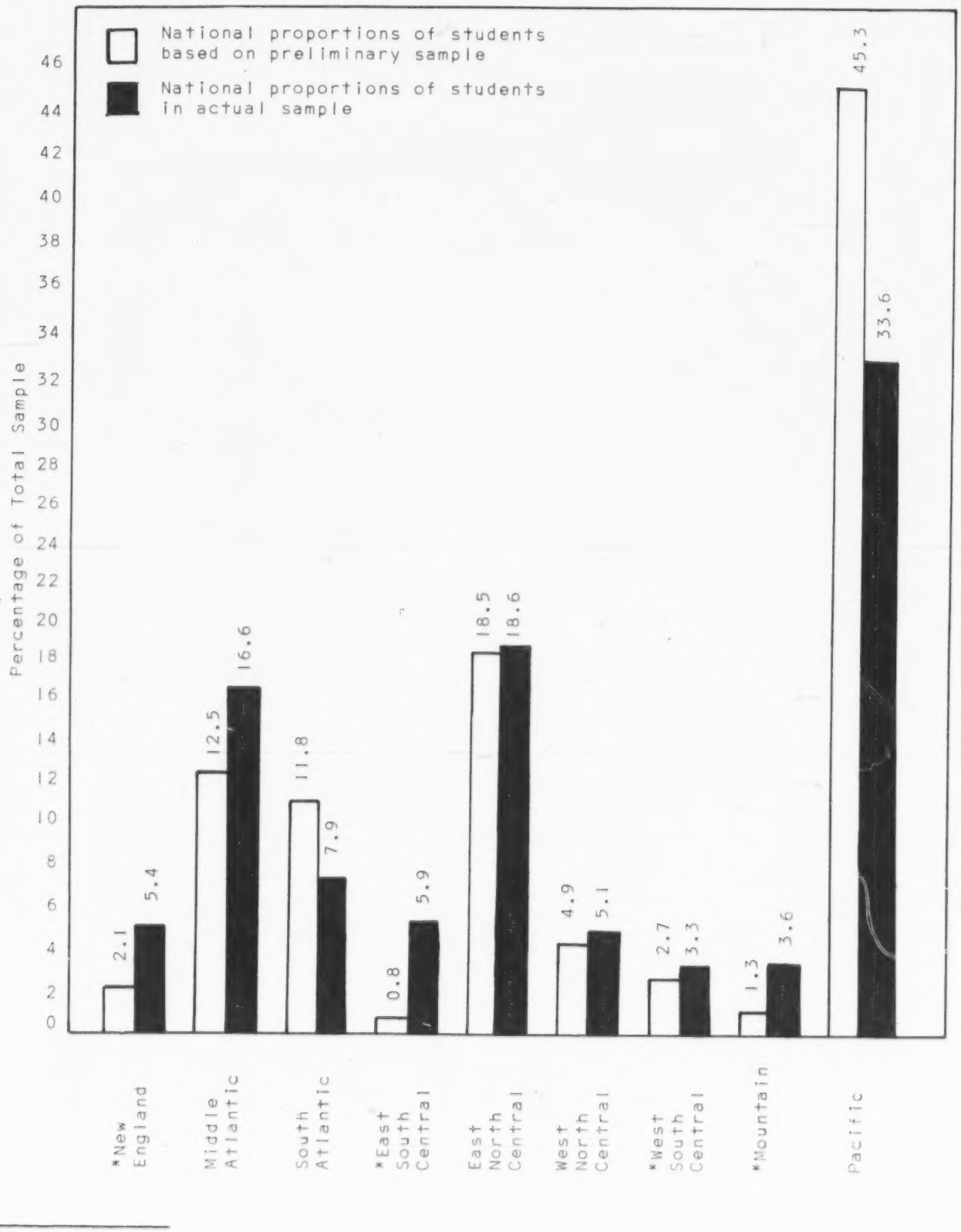
THE SAMPLE

Some differences exist between the identified student sample and the sample as determined by returned questionnaires. As has been mentioned, 60 of the 86 schools which had agreed to cooperate were able to participate within the time limitations of the study. In addition, some of the participating schools did not furnish all of the respondents requested of them. Less than one percent of the returned questionnaires were discarded because of failure of some subjects to follow directions or because of obvious lack of seriousness in answering the questions. On the designated date on which data processing was to begin, the sample numbered 5,533 junior college students. Eventually, it became necessary to delete 361 of these students from the sample because they were other than occupational student enrollees.

A comparison of the preliminary national sample and the actual sample in terms of the two major sampling variables may be seen in Figures II-2 and II-3. From these figures it can be seen that the number of respondents is reasonably close to the actual geographic and service area distributions. Deviations from the actual geographic distribution (Figure II-2) are primarily the result of intentional oversampling. The deviations are minor relative to the total sample.

FIGURE II-2

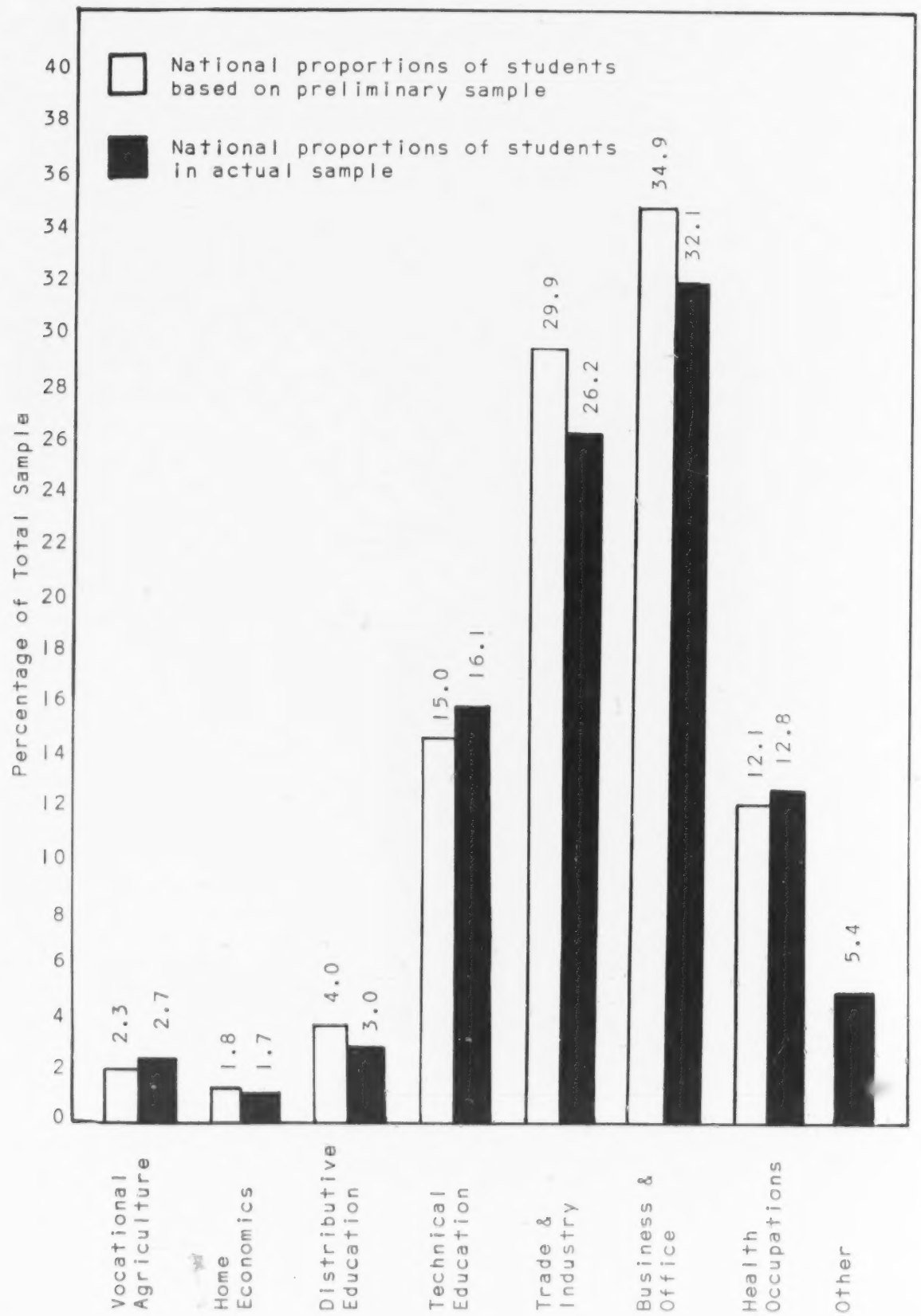
PERCENTAGE COMPARISON BETWEEN PRELIMINARY AND ACTUAL SAMPLES OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY GEOGRAPHIC SUBREGION



*Refers to subregions which were over-sampled.

FIGURE II-3

PERCENTAGE COMPARISON BETWEEN PRELIMINARY AND ACTUAL SAMPLES OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY SERVICE AREA



III. PERSONAL CHARACTERISTICS

This chapter examines some of the relevant personal characteristics of the junior college vocational students participating in this research. These data may be valuable to counselors who assist students in program selection, to curriculum committees who plan courses, and to teachers who are involved in pupil instruction. Two major categories of individual characteristics are explored: demographic variables and sociopsychological factors. The chapter ends with a brief summary.

DEMOGRAPHIC CHARACTERISTICS

Data pertaining to the distribution of the respondents according to sex, race, age, marital status, and religion are presented in this section. In addition to reporting the findings for the total sample, data on various subgroups are frequently presented and compared.

SEX DISTRIBUTION

In general, male students outnumber female students in American institutions of higher education. Data derived from 5,089[1] members of the national sample reveal that the ratio of males to females is approximately 3 to 2.

It may be of interest to compare this sex breakdown with those of specific occupational student subpopulations for the United States as a whole (see Table 3.1).

As expected, for each student population considered, the proportion of men exceeds that of the women. The percentage distribution of the respondents by sex in the present research approximate more closely that of vocational-technical majors in public, two-year institutions. This is also as expected since the present study's sample was selected from that student universe.

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[1]The number of cases will vary from one set of data to another. This is because "no answers" have been omitted from the calculations.

TABLE 3.1

SEX DISTRIBUTION OF PRESENT STUDY'S SAMPLE COMPARED WITH THOSE OF POST-SECONDARY OCCUPATIONAL STUDENTS, BY LEVEL AND CONTROL, UNITED STATES, 1968

Institutional Level and Control	Sex				Total
	Male		Female		
	Number	Percent	Number	Percent	
*Private, four-year	11,579	53.2	10,206	46.8	21,785
*Public, four-year	40,667	63.7	23,152	36.3	63,819
*Private, two-year	13,900	54.3	11,706	45.7	25,606
*Public, two-year	294,164	61.6	183,169	38.4	477,333
Present study	3,004	59.1	2,085	40.8	5,089

*These data are reported by Chandler (1969: 6-7).

The sex distribution of the students was also examined, controlling for the student's vocational-technical service area (see Table 3.2). With the exception of distributive education, each of the program areas do not have a male to female ratio approaching that of the total sample. This is understandable since certain service areas prepare students primarily for male- or female-oriented occupations. For instance, significantly greater proportions of females are enrolled in home economics, health and business-office curricula. The males greatly exceed the females in the technical, trade and industry, and vocational agriculture areas.

Within the female subgroup (N=2085), business-office and health occupations are most highly represented with slightly more than one-half of the girls enrolled in the former and nearly one-third in the latter. As far as the 3,004 males are concerned, more than two-fifths are pursuing trade and industrial programs, and about one-fifth to one-fourth are following business-office and technical-oriented work training. Insignificant percentages (all 3.5 or less) of the male subgroups are found in the other occupational preparation areas.

TABLE 3.2

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY SEX

Sex	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Male	37.7	64.0	7.8	13.0	92.6	90.5	71.3
Female	62.3	36.0	92.2	87.0	7.4	9.5	28.7
TOTAL (Number)	100.0 (1718)	100.0 (164)	100.0 (690)	100.0 (92)	100.0 (868)	100.0 (1414)	100.0 (143)

The question arises as to whether the proportion of males to females in the community college student sample is evenly distributed from one geographical area to another. The occupational students were categorized into one of nine Census geographic subregions; the relationships between sex and geographical subregion are shown in Table 3.3.

With the exception of the West South Central, West North Central and Mountain regions, the ratio of males to females approximates the ratio for the sample as a whole. For each of the areas identified above, a majority of the students are females. This is explained by the fact that each of the three subsamples is skewed toward those service areas in which females predominate.

AGE DISTRIBUTION

It has been established that public junior college enrollees, in general, tend to represent two relatively distinct student categories (Raines, 1967: 13). One group is composed primarily of individuals less than 20 years old, most are full-time students, and many pursue part-time jobs. The other group consists basically of older part-time students who work full-time and limit their participation in education to evening classes. In the present investigation, slightly more than one-half of 5,102 students are 19 years old or younger. In other words, a majority of the respondents represent the traditional age grouping for college freshmen and sophomores. Of the slightly less than one-half who are 20 years or more, approximately one-fourth are 20 years old and about one-seventh are 24 years or older. These and other relevant data are presented in Table 3.4.

The manner in which the respondents, by sex, are distributed across the age groupings is worthy of consideration. As Table 3.5 demonstrates, only one fairly major difference exists when the male and female distributions are compared. This pertains to the "18 years or less" category where females outnumber the males by nearly five percent.

The age distribution of the junior college occupational students is examined further in Table 3.6. This table shows the age distribution of the respondents, classified according to service area. With the exception of health occupations, there are proportionately more respondents in each program area who are 19 years old than of any other age; over one-third to more than two-fifths of the students in these specialty areas are 19 years of age. In the health occupations area, 24 year old and over students are the most numerous.

TABLE 3.3

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO GEOGRAPHIC SUBREGION, BY SEX

Sex	Geographic Subregion								
	New England	Middle Atlantic	South Atlantic	East South Central	East North Central	West South Central	West North Central	Mountain	Pacific
Male	63.1	67.5	58.1	59.0	65.3	42.5	45.6	47.3	55.9
Female	36.9	32.5	41.9	41.0	34.7	57.5	54.4	52.7	44.1
TOTAL (Number)	100.0 (279)	100.0 (837)	100.0 (396)	100.0 (293)	100.0 (957)	100.0 (167)	100.0 (272)	100.0 (188)	100.0 (1718)

TABLE 3.4

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY AGE

Age	Number	Percent
18 years or less	781	15.3
19 years	1847	36.2
20 years	983	19.3
21 years	397	7.8
22 years	171	3.3
23 years	121	2.4
24 years or more	802	15.7
TOTAL	(5102)	100.0

TABLE 3.5

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SEX, BY AGE

Age	Sex	
	Male	Female
18 years or less	13.4	18.0
19 years	35.8	36.7
20 years	19.8	18.5
21 years	8.8	6.4
22 years	4.1	2.2
23 years	3.1	1.3
24 years or more	14.9	16.9
TOTAL (Number)	99.9 (3004)	100.0 (2093)

TABLE 3.6

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY AGE

Age	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
18 years or less	19.1	17.7	10.5	11.8	14.7	12.8	22.4
19 years	38.1	34.1	24.7	40.9	39.4	37.5	37.1
20 years	19.6	29.3	14.5	24.7	18.2	20.2	19.6
21 years	6.9	3.7	8.8	8.6	9.2	7.8	9.1
22 years	2.6	3.7	4.0	4.3	3.6	4.1	0.0
23 years	1.9	0.6	2.0	2.2	3.9	2.5	2.1
24 years or more	11.9	11.0	35.5	7.5	11.0	15.2	9.8
TOTAL (Number)	100.1 (1721)	100.1 (164)	100.0 (696)	100.0 (93)	100.0 (866)	100.1 (1404)	100.1 (143)

RACE DISTRIBUTION

Data on racial group memberships were secured from 5,127 of the community-junior college occupational students. The percentage distribution of the respondents are as follows: white (91.6); black (5.3); oriental (1.7); and other (1.4).

Census data were used to compare the proportions of the United States population in the 18 to 24 age category[2] who were white and nonwhite[3] with the race breakdown of the subjects who participated in this research. For 1960, 12.2 percent of the individuals composing the 18 to 24 age group were nonwhite and 87.8 percent were white. From the standpoint of proportionate representation, the analysis suggests the nonwhite subgroup (summation of Negro, oriental and "other") is slightly underrepresented in the junior college sample, and perhaps, in junior college vocational-technical programs, in general. Underrepresentation is magnified if it is considered that two-year colleges attract proportionally more students from lower socioeconomic backgrounds than do four-year institutions, and that blacks, in particular, are overrepresented at this level of the social class structure. This subject will be discussed in greater detail in the last chapter.

What is the relationship between race and sex as they pertain to the national sample of students who participated in this study? Table 3.7 indicates that whereas roughly two-thirds of the whites and "others" sampled in this study are men, over two-thirds of the black students are women. Orientals are about equally divided among the sex categories.

The next analysis considers the relationships between age and race (see Table 3.8). There are two major differences for the same age groups when the whites and blacks are compared. Whereas 15 percent of the white vocational-technical students are 24 years or more, about 25 percent of the Negro junior college students are represented in this age grouping. On the other hand, nearly 37 percent of the whites are 19 years old, while 27 percent of the blacks are of this age.

Table 3.9 has been included to show the proportionate distributions of each racial group among the seven vocational-technical service areas. Our main interest is to examine the relative distributions of the white and black students. Proportionately speaking, a significantly greater percent of the black students

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[2]This is the age interval which lends itself to the most meaningful comparison with the present research.

[3]In 1960, 92 percent of the nonwhites were Negro.

TABLE 3.7

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO RACE, BY SEX

Sex	Race			
	White	Black	Oriental	Other
Male	60.7	30.2	51.2	62.3
Female	39.3	69.8	48.7	37.7
TOTAL (Number)	100.0 (4680)	100.0 (265)	99.9 (80)	100.0 (69)

TABLE 3.8

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO RACE, BY AGE

Age	Race			
	White	Black	Oriental	Other
18 years or less	15.4	16.0	9.4	8.8
19 years	36.7	27.1	44.7	32.4
20 years	19.6	17.5	16.5	10.3
21 years	7.8	8.2	4.7	10.3
22 years	3.3	4.1	7.1	4.4
23 years	2.3	2.6	4.7	5.9
24 years or more	15.0	24.5	12.9	27.9
TOTAL (Number)	100.1 (4670)	100.0 (269)	100.0 (85)	100.0 (68)

TABLE 3.9

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO RACE, BY SERVICE AREA

Service Area	Race			
	White	Black	Oriental	Other
Business and Office	32.7	49.4	47.7	27.5
Distributive Education	3.3	1.1	3.5	4.3
Health Occupations	12.8	27.9	10.5	17.4
Home Economics	1.9	1.1	0.0	0.0
Technical Education	17.9	4.2	12.8	10.1
Trade and Industry	28.4	16.2	22.1	40.6
Vocational Agriculture	3.0	0.0	3.5	0.0
TOTAL (Number)	100.0 (4664)	99.9 (265)	100.1 (86)	99.9 (69)

are majors in business-office and health occupations. On the other hand, greater percentages of white subjects represent technical education and vocational agriculture; it is of interest to note that few if any Negroes are in these areas. In interpreting these comparisons, the reader should keep in mind that the ratio of whites to blacks is about 18 to 1.

Descriptive data were also gathered on the racial distribution of the sample while controlling for the respondent's geographical subregion. As shown in Table 3.10, the proportions of white and black students are about evenly represented in the Pacific and East North Central subsamples. These two regions respectively rank first and second as to their proportional contribution to the composite sample and account for over one-half of the white and black respondents. Among the white student group, the Middle Atlantic region ranks next in relative proportional size (17.3 percent); only 4.8 of the black occupational students are located in this region. In contrast, the East South Central region is the third highest contributor of black students (17.1 percent);

TABLE 3.10

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO RACE, BY GEOGRAPHIC SUBREGION

Geographic Subregion	Race			
	White	Black	Oriental	Other
New England	5.8	1.9	0.0	1.4
Middle Atlantic	17.3	4.8	1.2	7.2
South Atlantic	7.9	9.3	0.0	0.0
East South Central	5.3	17.1	0.0	1.4
East North Central	19.2	20.1	3.5	1.4
West North Central	3.0	9.7	1.2	4.3
West South Central	5.7	2.2	0.0	1.4
Mountain	3.8	1.5	3.5	5.8
Pacific	32.0	33.5	90.7	76.9
TOTAL (Number)	100.0 (4677)	100.1 (269)	100.1 (86)	99.8 (69)

only 5.3 percent of the white students are residents of the East South Central region.

MARITAL STATUS DISTRIBUTION

Marital status is another relevant variable considered in describing the sample of community college vocational-technical students on which this report is based. The descriptive categories and percent of 5,140 students in each category are as follows: single = 69.9; engaged = 10.1; married, no children = 6.2; married, with children = 11.5; widowed, divorced, or separated = 2.3.

It should be recalled that the sex ratio characteristic of the total sample is about 3 to 2 in favor of the males. When the sample is examined as to its sex distribution among the five marital status categories, only the proportions of males and females in the "single" category approximate those of the national sample. In each of the other categories, women are overrepresented. This is particularly true in the "widowed, divorced, or separated" category; three-fourths of the 112 students with this marital status are females (see Table 3.11).

TABLE 3.11

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO MARITAL STATUS, BY SEX

Sex	Marital Status				
	Single	Engaged	Married, no children	Married, with children	Widowed, divorced, or separated
Male	62.2	47.7	59.6	55.2	25.0
Female	37.8	52.3	40.4	44.8	75.0
TOTAL (Number)	100.0 (3573)	100.0 (514)	100.0 (319)	100.0 (585)	100.0 (112)

It is logical to expect a relationship between the respondent's age and his marital status. An inspection of Table 3.12 leads to several general conclusions. For instance, there is an inverse relationship between age and whether or not the respondent is single; the younger the respondent, the greater the chances he is unmarried. A modal curve typifies the relationship between "engaged" and years of age. There is a decided tendency for the percentage of respondents who are married (no children), married (with children), and widowed, divorced, or separated to increase with age.

Are certain service areas selective of students representing particular marital status characteristics? An examination of Table 3.13 will provide some answers to this question. In general, five of the service areas are quite similar as to marital status patterns; however, the home economics and health occupation areas

TABLE 3.12

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO AGE, BY MARITAL STATUS

Marital Status	Age						
	18 years or less	19 years	20 years	21 years	22 years	23 years	24 years or more
Single	87.5	84.2	77.4	69.8	56.7	47.9	17.3
Engaged	9.6	11.7	12.8	14.6	9.9	5.8	2.2
Married, no children	1.7	2.4	6.8	8.6	16.4	26.4	12.5
Married, with children	1.2	1.5	2.6	5.8	12.3	16.5	56.7
Widowed, divorced, or separated	0.1	0.1	0.3	1.3	4.7	3.3	11.2
TOTAL (Number)	100.1 (781)	99.9 (1847)	99.9 (983)	100.1 (397)	100.0 (171)	99.9 (121)	99.9 (802)

TABLE 3.13

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY MARITAL STATUS

Marital Status	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Single	73.5	77.2	47.0	66.7	75.7	72.5	76.8
Engaged	11.7	11.7	9.8	21.5	9.6	7.7	9.9
Married, no children	5.1	2.5	8.5	3.2	6.1	7.1	6.3
Married, with children	7.8	7.4	25.8	8.6	8.3	11.7	6.3
Widowed, divorced, or separated	2.0	1.2	8.9	0.0	0.2	1.0	0.7
TOTAL (Number)	100.1 (1722)	100.0 (162)	100.0 (694)	100.0 (93)	99.9 (865)	100.0 (1417)	100.0 (142)

deviate considerably from this pattern. Over one-fourth of the health occupations students are married and have children; almost one-tenth are widowed, divorced, or separated. In the home economics areas, slightly more than one-fifth of the students are engaged.

RELIGION DISTRIBUTION

Religious preference is another important demographic characteristic. Respondents expressing a preference for the Protestant religion totaled almost one-half of the 5,135 students who responded to this item. Almost one-third of the sample indicated a preference for the Catholic religion. Two and three-tenths percent preferred the Jewish religion. In addition, 6.3 percent of the occupational students said they had no religion, and 12.8 percent indicated they either had a religion other than Catholic, Jewish, or Protestant, or they preferred not to answer.

The Protestant religion includes a variety of denominations. As such, data pertaining to denominational preferences should provide additional understanding. Specific indications of preferred Protestant denominations were provided by 2,609 respondents; the distributions are presented in Table 3.14. Approximately seven out of 10 of the Protestants prefer one or the other of four denominations: Baptist (24.4 percent); Methodist-Brethren (19.2 percent); Lutheran (14.5 percent); and Presbyterian (13.1 percent).

SOCIAL-PSYCHOLOGICAL FACTORS

The concern of this chapter shifts to an examination of certain perceptions held by the junior college occupational students. Although knowledge in this area appears crucial to the development of educational systems which are more congruent with the needs, attitudes, and values of students, the data available appear to be extremely sparse. The data to be presented pertain to the topics of self-esteem and success.

SELF-ESTEEM EVALUATIONS

It is commonplace knowledge that an individual's self-definition has significant implications for his behavior. For example, adjustment in academic as well as nonacademic situations is partly dependent upon the nature of a person's self-definition. How do the students in this sample perceive themselves? The findings are restricted to self-perceptions bearing on the respondents' self-esteem.

TABLE 3.14

DISTRIBUTION OF PROTESTANT JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY DENOMINATIONAL PREFERENCE

Protestant Denomination	Number	Percent
Lutheran	380	14.5
Episcopal	151	5.8
Presbyterian	341	13.1
Congregational (United Church of Christ)	151	5.8
Christian Church (Disciples of Christ, Church of Christ)	182	7.0
Christian Scientist	13	.5
Baptist	637	24.4
Assembly of God	110	4.2
Methodist (Brethren)	502	19.2
Seventh Day Adventist	32	1.2
Greek Orthodox	24	.9
Latter Day Saints (Mormons)	63	2.4
Unitarian (Universalist)	16	.6
Covenant	7	.3
TOTAL	(2609)	99.9

The term self-esteem refers to an estimation of self-worth or self-acceptance. For illustrative purposes, a person of high esteem " . . . feels that he is a person of worth; he respects himself for what he is, but he does not stand in awe of himself, nor does he expect others to stand in awe of him. He does not necessarily consider himself superior to others" (Rosenberg, 1965: 31).

Data were collected on nine of the 10 items devised by Rosenberg and used as a measurement of self-esteem.[4] Using a modification of his scoring procedures, the individual scores were categorized into "high," "medium," and "low" self-image estimations (Rosenberg, 1965: 16-31). Of the 14,962 students who responded to all nine items, 54.1 percent had "high" self-esteem, 37.3 percent had "medium" self-esteem, and 8.5 percent had "low" self-esteem. By and large, these results suggest that most of the occupational students have considerable confidence which constitutes an important requisite for maximizing the chances for facile adjustments.

Similar data on junior college students are not available. However, a major study by Astin, Panos, and Creager (1967) did investigate a series of specific personality and/or behavioral dimensions which have some relevance for a person's self-definition. The following generalizations are evident from an inspection of their data: (1) junior college freshmen were less self-confident than four-year college and university freshmen in such areas as academic ability, drive to achieve, leadership ability, mathematical ability, intellectualism, and writing ability; and (2) a larger proportion of junior college students than four-year college students rated themselves above average in athletic ability, artistic ability, defensiveness, and mechanical ability.

It may be of interest to compare the self-esteem distribution of the respondents in the present research with that found by Rosenberg (1965).[5] His sample (N=3142) was proportionally divided among esteem categories as follows: high self-esteem = 44.7 percent, medium self-esteem = 44.5 percent, and low self-esteem = 13.8 percent. As such, a definite tendency exists for the "self concepts" of the vocational-technical students to be more favorable than those of the high school students. This is understandable since Rosenberg's sample represents a stage in the life cycle when the problems (e.g., career and educational choices, struggle for

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[4]See Appendix "F" for discussion of scale.

[5]This research was based on 5,024 questionnaires completed by junior-senior students in 11 public high schools of New York State. The sample was randomly selected; the schools were stratified by size of community.

independence from parents, immediate postpuberty period, etc.) associated with the formulation of one's self-definition would seem to be common and acute.

A question arises concerning the relationship between self-esteem and sex. Table 3.15 shows the respondents are quite evenly distributed among the three self-esteem categories when the respondent's sex is controlled.

TABLE 3.15

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SEX, BY SELF-ESTEEM LEVEL

Self-Esteem Level	Sex	
	Male	Female
High	54.4	53.8
Medium	37.4	37.2
Low	8.1	9.1
TOTAL (Number)	99.9 (2924)	100.1 (2038)

Figure III-1 demonstrates the association between self-esteem and age. There is a definite tendency for greater proportions of the older respondents to have more favorable self-definitions than do the younger respondents. The greatest differences are characteristic of the youngest and oldest respondents in the sample. About one out of two of the 18 year old or younger students have high self-esteem; two out of three of the 24 year old or older students have high self-esteem. It may be inferred from these findings that younger students may have a greater need for guidance and counseling than older students.

The vocationally-oriented students were categorized as to race and their distribution as to self-esteem level determined (see Table 3.16). Whereas greater proportions of the white and black students have "high" self-esteem, greater proportions of the oriental and "other" students have "medium" self-esteem.

FIGURE III-1

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SELF-ESTEEM LEVEL, BY AGE

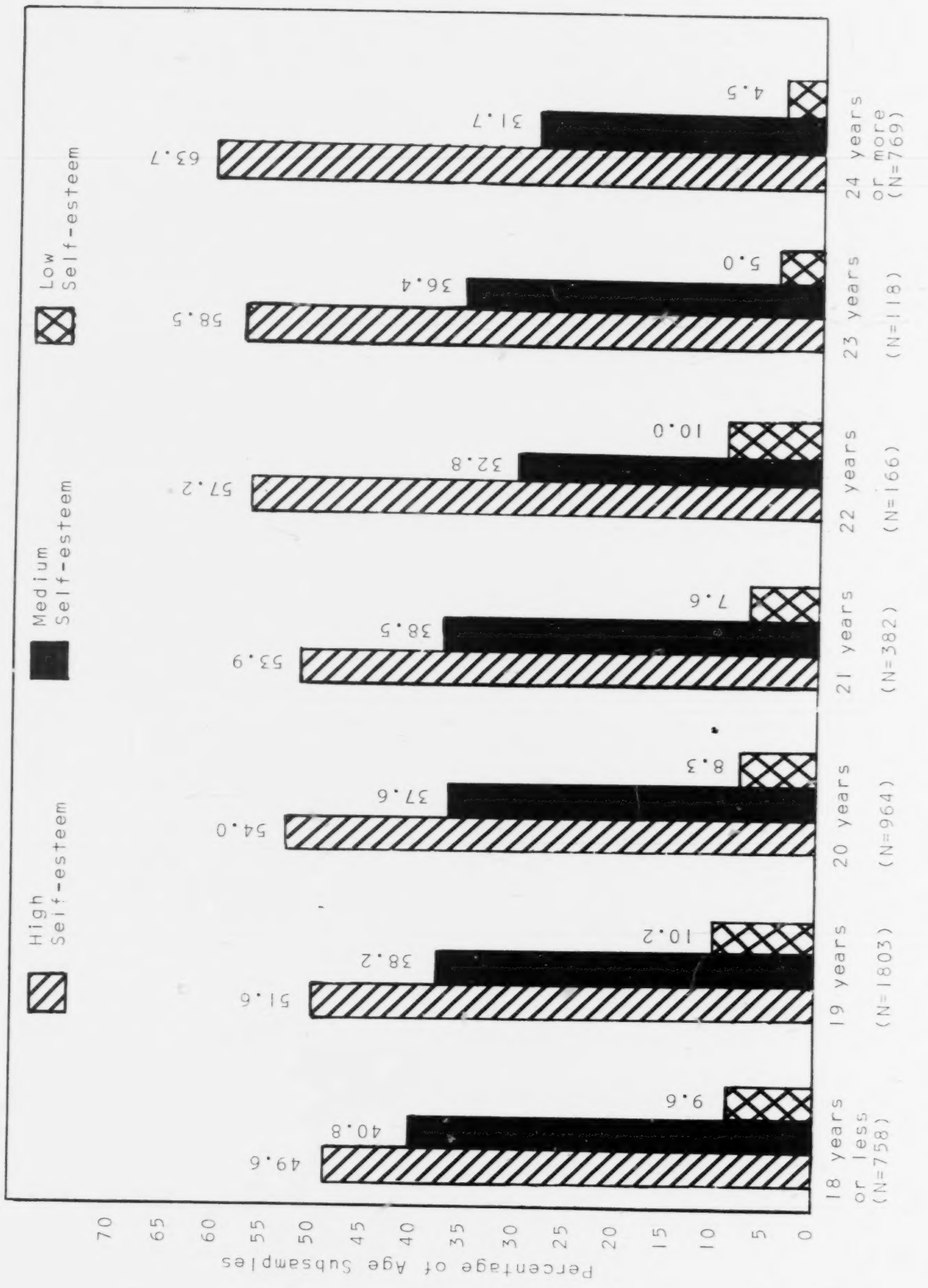


TABLE 3.16

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO RACE, BY SELF-ESTEEM LEVEL

Self-Esteem Level	Race			
	White	Black	Oriental	Other
High	54.4	58.8	38.6	37.8
Medium	37.0	36.3	47.0	51.5
Low	8.5	4.8	14.4	10.6
TOTAL (Number)	99.9 (4565)	99.9 (248)	100.0 (83)	99.9 (66)

Is there a tendency for certain service areas in vocational-technical education to attract students significantly different from other service areas relative to self-esteem? Table 3.17 depicts the distribution of the respondents as to either "high," "medium," or "low" self-esteem for each of the service areas. Although a pattern of basic similarity is apparent, there is one major deviation which merits identification. Proportionately speaking, more vocational agriculture students have "medium" and "low" self-esteem and fewer "high" self-esteem than is the case for each of the other service areas.

SUCCESS PERCEPTIONS

In this section, the respondents' perceptions regarding various dimensions of success are discussed. Specifically, data are presented on success orientations, success chances, and success qualities.

Success Orientation. In a culture which places a great emphasis upon "success," it is important to have at least a basic understanding of the relative importance "getting ahead" occupies in the motivational system of the individual occupational students. Each student was asked: "How important to you, personally, is it to get ahead in life?" As Figure III-2 portrays approximately

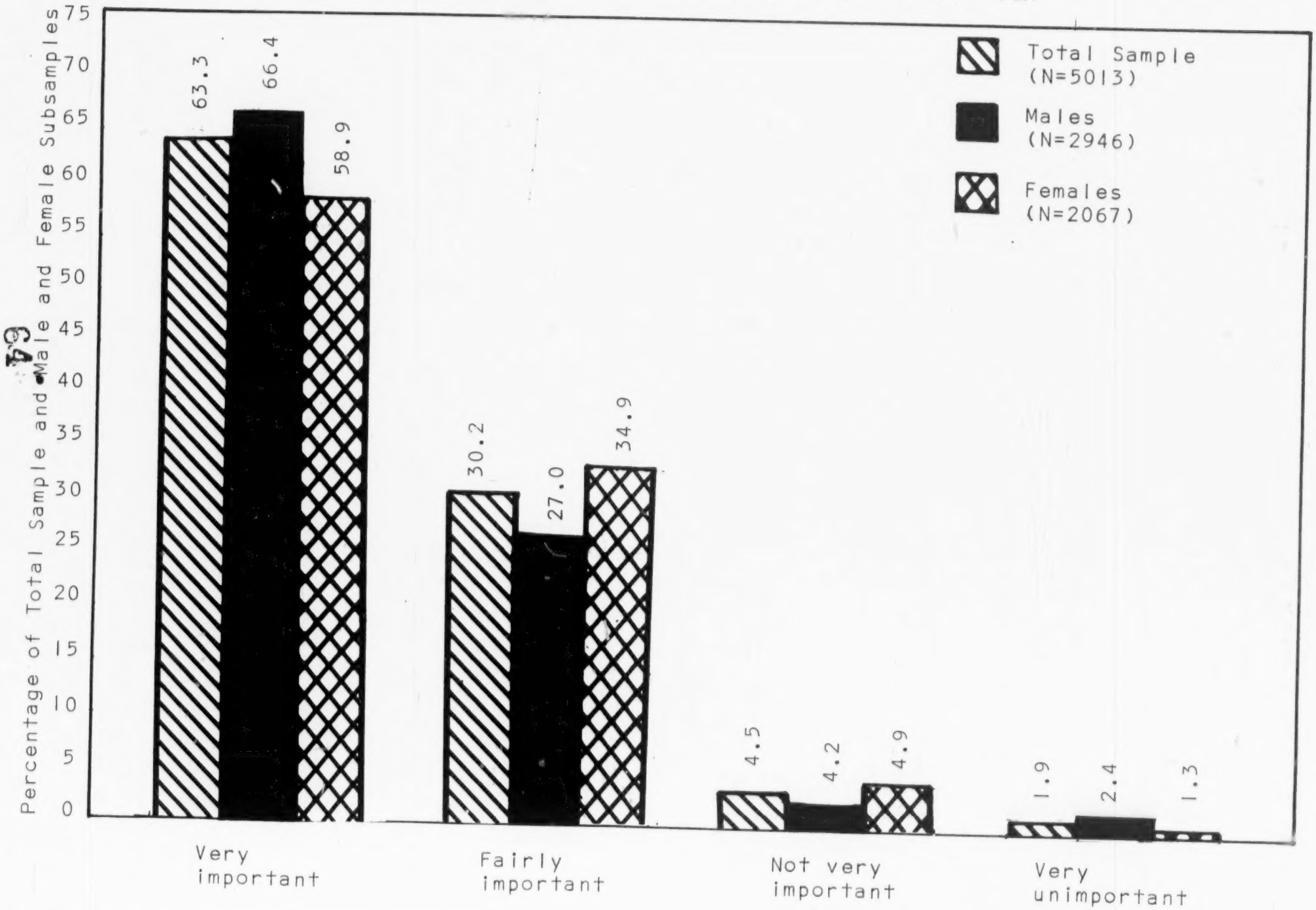
TABLE 3.17

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY SELF-ESTEEM LEVEL

Self-Esteem Level	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
High	52.0	57.5	58.2	58.4	52.9	55.2	47.2
Medium	38.0	36.1	34.4	37.1	38.9	37.1	40.8
Low	10.1	6.3	7.2	4.5	8.2	7.7	12.0
TOTAL (Number)	100.1 (1673)	99.9 (158)	99.8 (671)	100.0 (89)	100.0 (848)	100.0 (1375)	100.0 (142)

FIGURE III-2

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO RELATIVE IMPORTANCE OF GETTING AHEAD, BY TOTAL SAMPLE AND SEX



two out of three of the junior college students considered it "very important" to get ahead in life; slightly more than nine out of 10 either considered it "very important" or "fairly important." Only slightly more than six percent of the respondents shared success orientations wherein it is either "not very important" or "very unimportant" for them to achieve success.

As also shown in Figure III-2, only minor differences characterize the male versus female distributions. However, there is a tendency for men to attribute greater importance to success than is the case for women.

How does the "success orientation" of the sample as a whole compare with data reported by other researchers? Two monographs by Bernard Rosenberg contain responses to the same question used in the present research to elicit the relative importance of "getting ahead." One study, referred to earlier, was based on a large statewide sample of junior-senior high school students (Rosenberg, 1965). The other investigation was based on a national sample of university students, selected on a representative basis from 11 universities throughout the nation (Rosenberg, 1957). The comparative results are included in Table 3.18.

The results of the present study are quite similar to those Rosenberg obtained from a sample of high school students, but they deviate significantly from the success orientations characteristic of the college students. Any attempt to explain the attitudinal discrepancies between the junior college and university students would be difficult. It can easily be concluded, however, that the junior college students, as a group, are mobility conscious and success striving. This orientation is compatible with the kind of educational experiences in which the occupational students are involved. This seems logical because individual mobility and success both derive in large measure from occupational advancement. Occupational advancement is facilitated by occupational training.

It is to be recalled that 58 percent of the junior college women and 66 percent of the junior college males believed "getting ahead" was very important. In contrast, 28 percent and 51 percent of the females and males, respectively, in Rosenberg's university student sample, ascribed the same relative importance to "success"; comparable data from the high school study were not located. Apparently, male and female junior college students are considerably more similar as to success orientations than male and female university students.

After the national sample of respondents were divided into the seven vocational-technical service areas, their percentage distributions as to importance of getting ahead reveal success

TABLE 3.18

PERCENTAGE COMPARISON BETWEEN SUCCESS ORIENTATION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN THE PRESENT STUDY WITH THOSE OF STUDENT GROUPS IN THE ROSENBERG STUDIES

"How important is it to you, personally, to get ahead in life?"	Present Study	Rosenberg's Studies	
		High School Students*	University Students**
Very important	63.3	62.9	45.0
Fairly important	30.2	32.0	53.0
Not very important or unimportant	6.4	4.9	2.0
TOTAL (Number)	99.9 (5013)	99.8 (3129)	100.0 (4585)

*These percentages represent a reanalysis of other data presented by Rosenberg (1965: 231).
**(Rosenberg, 1957: 33)

orientation tends to vary across service areas (see Table 3.19). The distributive education students are the most highly success oriented. Home economics majors are the least success oriented.

Success Chances. It is one matter to want to get ahead in life and another to expect to get ahead. As shown above, the vocational-technical junior college students were likely to attribute considerable importance to "getting ahead." However, as pictured in Figure III-3, they are clearly less likely to expect to get ahead. This is slightly more true of the females than the males.

The distribution of the respondents in terms of their responses to the question, "Realistically speaking, how good are your chances of getting ahead?", comes as no suprise. Invariably, past research has demonstrated that aspirations exceed expectations, the latter more closely approximating what will actually be achieved. We have no way of determining how success expectations

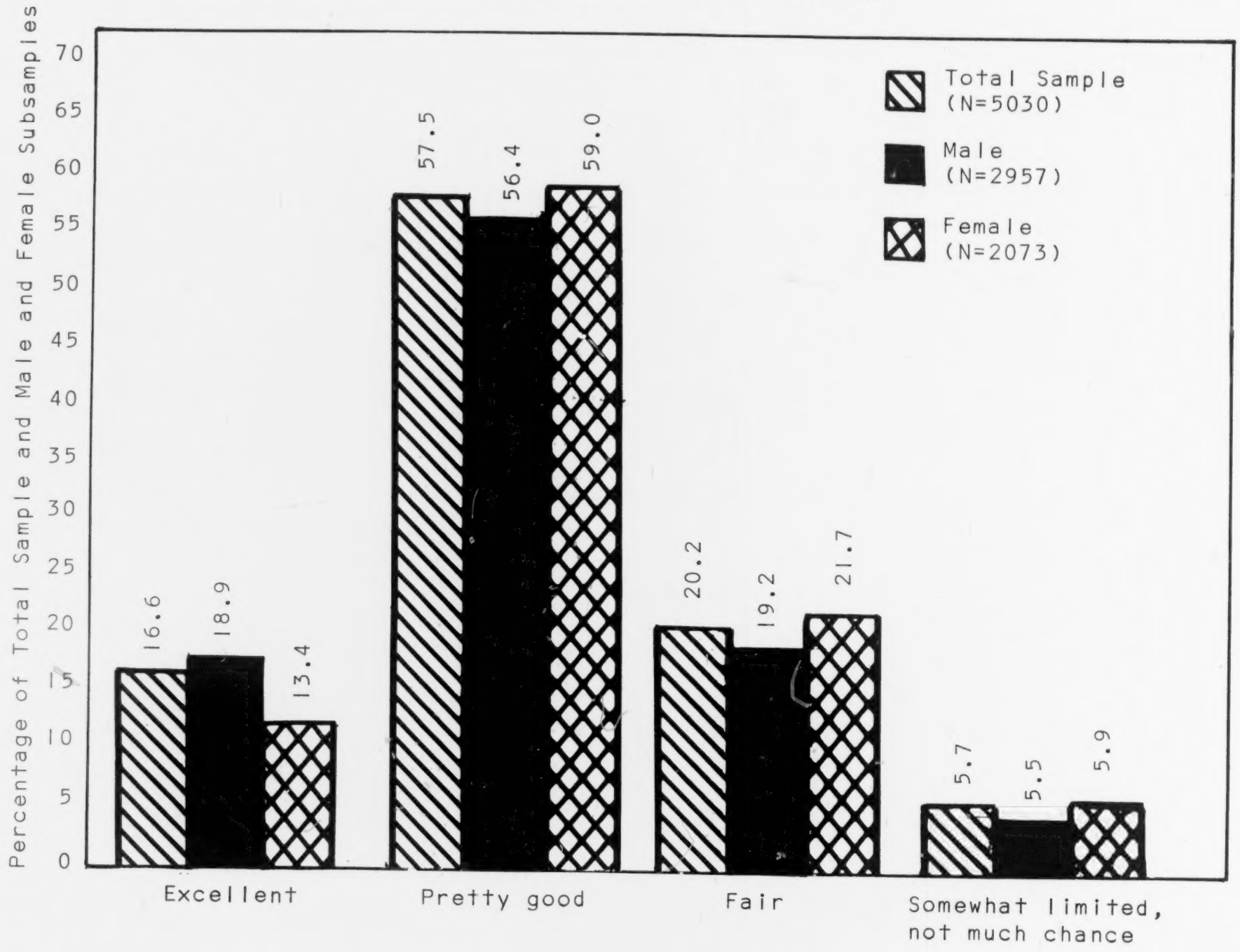
TABLE 3.19

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY SUCCESS ORIENTATION

"How important is it to you, personally, to get ahead in life?"	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Very important	63.9	73.7	59.5	41.8	61.8	66.1	56.3
Fairly important	30.0	22.5	34.8	47.3	30.9	27.2	34.5
Not very important or very unimportant	6.1	3.8	5.7	11.0	7.2	6.7	9.1
TOTAL (Number)	100.0 (1695)	100.0 (160)	100.0 (682)	100.1 (91)	99.9 (853)	100.0 (1388)	99.9 (142)

FIGURE III-3

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SUCCESS CHANCES, BY TOTAL SAMPLE AND SEX



of the occupational students compare with other groups of student respondents, since meaningful comparative data were not found.

It was reported earlier that certain variations typify the success orientations of the students when they are categorized as to vocational-technical service area. This same generalization is applicable to the students' perceived chances of getting ahead in life. On the whole, the distributive education majors are more optimistic than the members of other student subgroups. The home economics majors are the most pessimistic in this regard. Table 3.20 summarizes these and other findings.

Success Qualities. Data on the students' opinions concerning what they think represent important success qualities are discussed next. Knowledge in this area may have implications for understanding their behavior as students and certain expectations they may have of their training programs. With these ends in mind, the junior college students were asked: (1) "Which of these qualities is the most important for success?" and (2) "Which of these qualities is the second most important quality for success?" For each question, the respondents selected one of six specified factors. As reported in Figure III-4, the national sample was of the opinion that "hard work-effort" and "get along with people" ranked first or second as to most important and second most important success qualities. Both of these factors combined account for three-fourths of the first and second choices. The "special talent-ability" factor was accorded sufficient responses to result in it ranking a distant third as to most important as well as second most important success qualities.

SUMMARY

The initial purpose of the chapter is to describe the community-junior college occupational students as to selected demographic variables. The ratio of males to females is about 3 to 2. As would be expected, the females tend to be concentrated in service areas (health occupations, home economics, and business-office) which prepare individuals primarily for female-oriented jobs. This same statement is applicable to the males, but they are concentrated in technical, trade-industrial, and vocational agriculture. About one-half of the students are 19 years or younger; about one out of seven are 24 years or older. In comparison to their actual proportion in the population of the nation as a whole, the nonwhites are underrepresented in the sample as more than 90 percent of the occupational students are whites. This is particularly true of black males; two-thirds of the black subsample are females. A vast majority of the respondents are not married. Slightly more than one-fourth are either married or engaged. Approximately one-half of the students prefer the

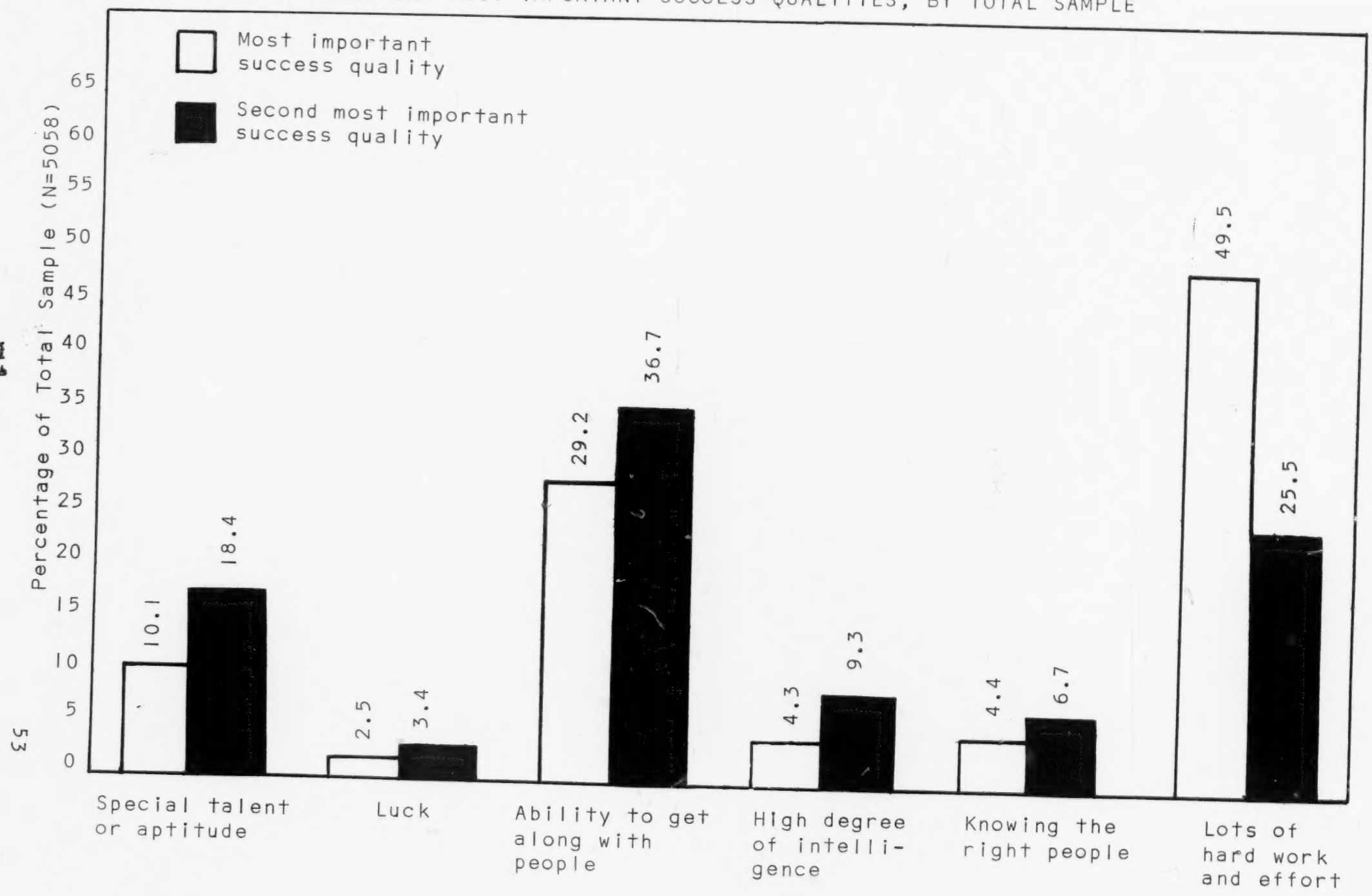
TABLE 3.20

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY SUCCESS CHANCES

"Realistically speaking, how good are your chances of getting ahead?"	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Excellent	14.8	24.5	17.4	11.0	17.9	16.9	15.7
Pretty good	57.2	51.5	59.5	54.9	59.9	56.1	60.0
Fair	22.1	18.4	18.0	28.6	17.1	20.6	20.0
Somewhat limited and not much chance	5.9	5.5	5.1	5.5	5.2	6.4	4.3
TOTAL (Number)	100.0 (1702)	99.9 (163)	100.0 (684)	100.0 (91)	100.1 (855)	100.0 (1390)	100.0 (140)

FIGURE III-4

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO MOST IMPORTANT AND SECOND MOST IMPORTANT SUCCESS QUALITIES, BY TOTAL SAMPLE



Protestant religion, most of whom are Baptists, Methodist-Brethrens, Lutherans, or Presbyterians.

A second objective of the chapter is to examine the perceptions held by the students in the areas of "self-esteem" and "success." Most of the respondents have favorable self-esteem ratings as indicated by the finding that nearly one-half and one-third have high and medium self-esteem definitions, respectively. When these results are compared with similar data on high school students, the junior college subjects are more inclined to evaluate themselves positively. Definite tendencies exist for those students who are younger and/or majoring in vocational agriculture to accord themselves negative ratings as to self-esteem.

Slightly more than nine out of 10 students considered it either "very important" or "fairly important" to get ahead in life, suggesting that as a group, the sample members are mobility conscious and success striving. The relative strengths of the success orientation vary from one service area to another, with distributive education majors being the most success oriented and home economics students the least. These service areas also tend to be, respectively, the most and least optimistic concerning their chances of getting ahead. For the sample as a whole, about seven out of 10 feel their chances of getting ahead are "excellent" or "pretty good." The qualities of "lots of hard work and effort" and "ability to get along with people" rank first and second, respectively, as the most important and second most important qualities leading to success; they account for three-fourths of the first and second choices.

IV. EDUCATIONAL BACKGROUND FACTORS

Intelligent curriculum development and program planning on the post-high school level requires up-to-date information about a number of areas. It goes without saying that much importance must be attributed to the student's previous educational experiences. This chapter examines a few of the educational background factors of junior college vocational students which could have a bearing on guidance programs and curriculum development. More specifically, the material is organized around three major topics: high school grades, high school extracurricular activities, and high school course profile. The major findings are briefly stated in a summary section.

HIGH SCHOOL GRADES

Academic ability has been studied more extensively than any other variable relative to successful adjustment and achievement in higher education. Numerous studies have investigated the relationships between various measures of academic ability, either alone or in conjunction with other variables, e.g., variables as which students will enter college (Schoenfeldt, 1966), percentage of high school graduates entering college (Wolfle, 1954), type of higher educational institution selected (Medsker and Trent, 1965; Schoenfeldt, 1968; Panos, 1966; Astin, *et al.*, 1967), levels of attainment (Sewell and Shah, 1967; Hakanson, 1967), and type of program in which the student is enrolled (Linn and Davis, 1966).

In view of the research emphasis given academic ability, it is relevant to examine the distribution of ability among the occupational students participating in the present research. It is also of interest to compare these data with those available on students enrolled in other types of schools and programs.

Self-reported high school grades were used as the measure of ability. A number of reasons justify the use of self-reported grades in this manner. First, the data collection procedure which was used made it more feasible and convenient to secure this information directly from the respondent. Second, other studies have used self-reported grades as a measure of ability and their findings could easily be compared with those of the present research (Panos, 1966; Astin, *et al.*, 1967). Third, it has been shown that students' self-reported high school grades are highly accurate when compared with the grades indicated in high school records (Davis, 1964; Holland and Richards, 1966).

Figure IV-1 shows the distribution of self-reported grades among 5,125 vocational students. It is important to stress that although vocational-technical education has often been considered a refuge for inferior students, over one-fourth of the total sample are "B" or better high school students; over 90 percent of the respondents are "C" or better students. One conclusion suggested by these data is that few academically below average high school students receive occupational education beyond high school at the community college level. At the same time, however, very few academically superior (mostly A's) students enroll in community-junior colleges after high school. For, as Cross (1970) also concluded: "Low-ability high school graduates do not continue their education, and high-ability graduates are more likely to enter four-year colleges."

The present study was compared with pertinent findings disclosed by Astin, Panos, and Creager (1967). As revealed in Table 4.1, the junior college occupational students who participated in the present study do not differ greatly in academic ability from junior college students in general. The slightly greater tendency for larger proportions of occupational students to report having received higher grades may be explained by the fact that the Astin, *et al.* data were from entering freshmen students, whereas sophomores represent nearly 40 percent of the present study's sample. Undoubtedly, some attrition of lower ability students has already occurred. Table 4.1 also portrays the often reported skewness toward the lower end of the scale of junior college students relative to students enrolled in four-year colleges and universities.

When the vocational-technical students are categorized as to high school grades and sex (Figure IV-2), the most striking finding is the apparent superiority of female students. For example, whereas 18 percent of the men indicated most of their high school grades were in one of the top three grade categories, almost 40 percent of the women reported having received grades in these categories. This finding is not entirely unexpected. Traditionally, the pressure for men to pursue a higher education has been greater, and consequently, less of a selectivity factor is operative in the male student recruitment process. In fact, data collected in this research indicate that the male respondents were given more parental encouragement than females to pursue post-high school education.[1] As a result, females represent a somewhat more select group in as much as a tendency exists for only the more able and/or more motivated girls to obtain additional education beyond the high school level.

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[1] These data will be discussed fully in Chapter VI.

FIGURE IV-1

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SELF-REPORTED HIGH SCHOOL GRADES, BY TOTAL SAMPLE

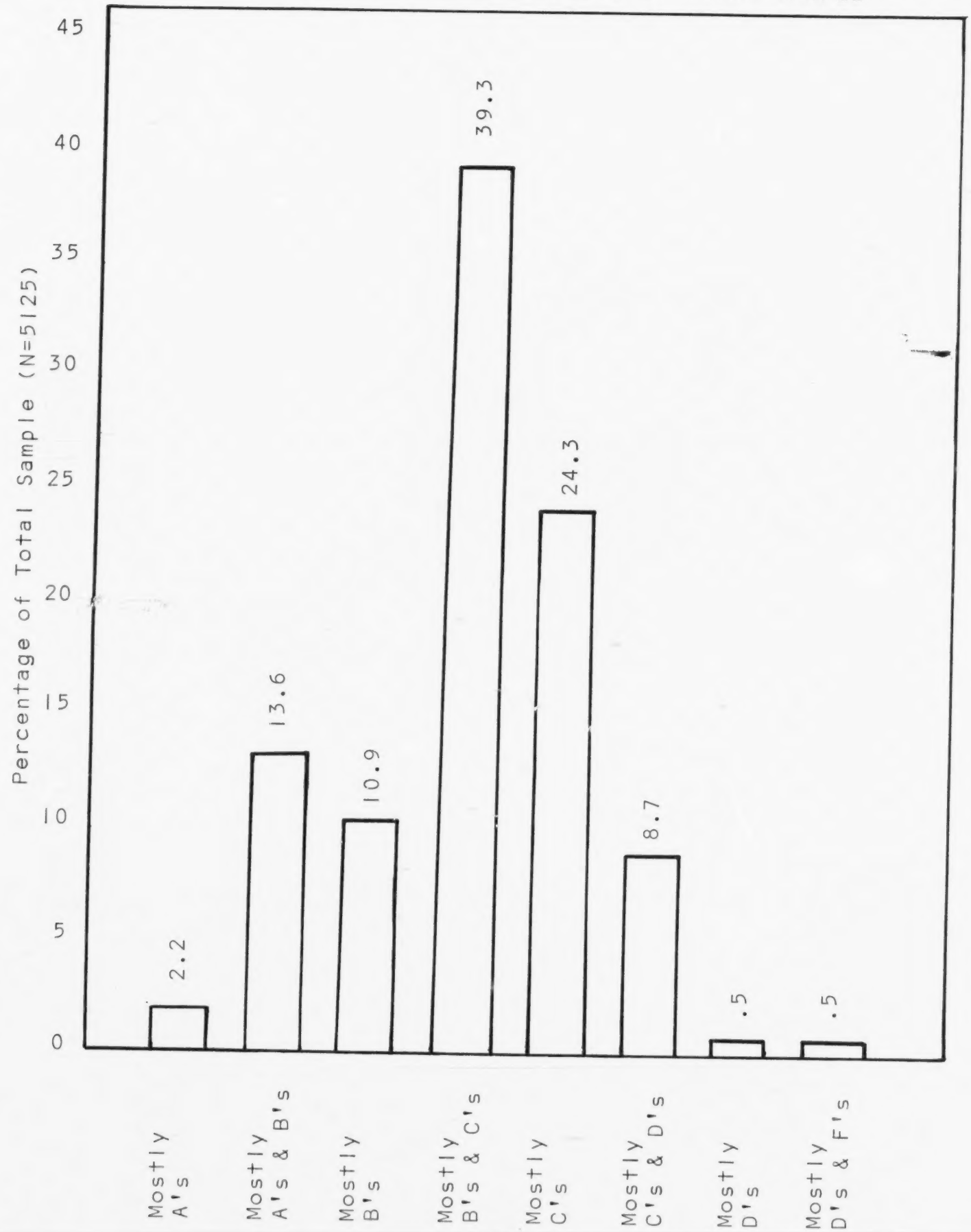


TABLE 4.1

PERCENTAGE COMPARISON OF HIGH SCHOOL GRADES OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN THE PRESENT STUDY WITH GRADES OF STUDENT GROUPS IN THE ASTIN, PANOS, AND CREAGER STUDY*

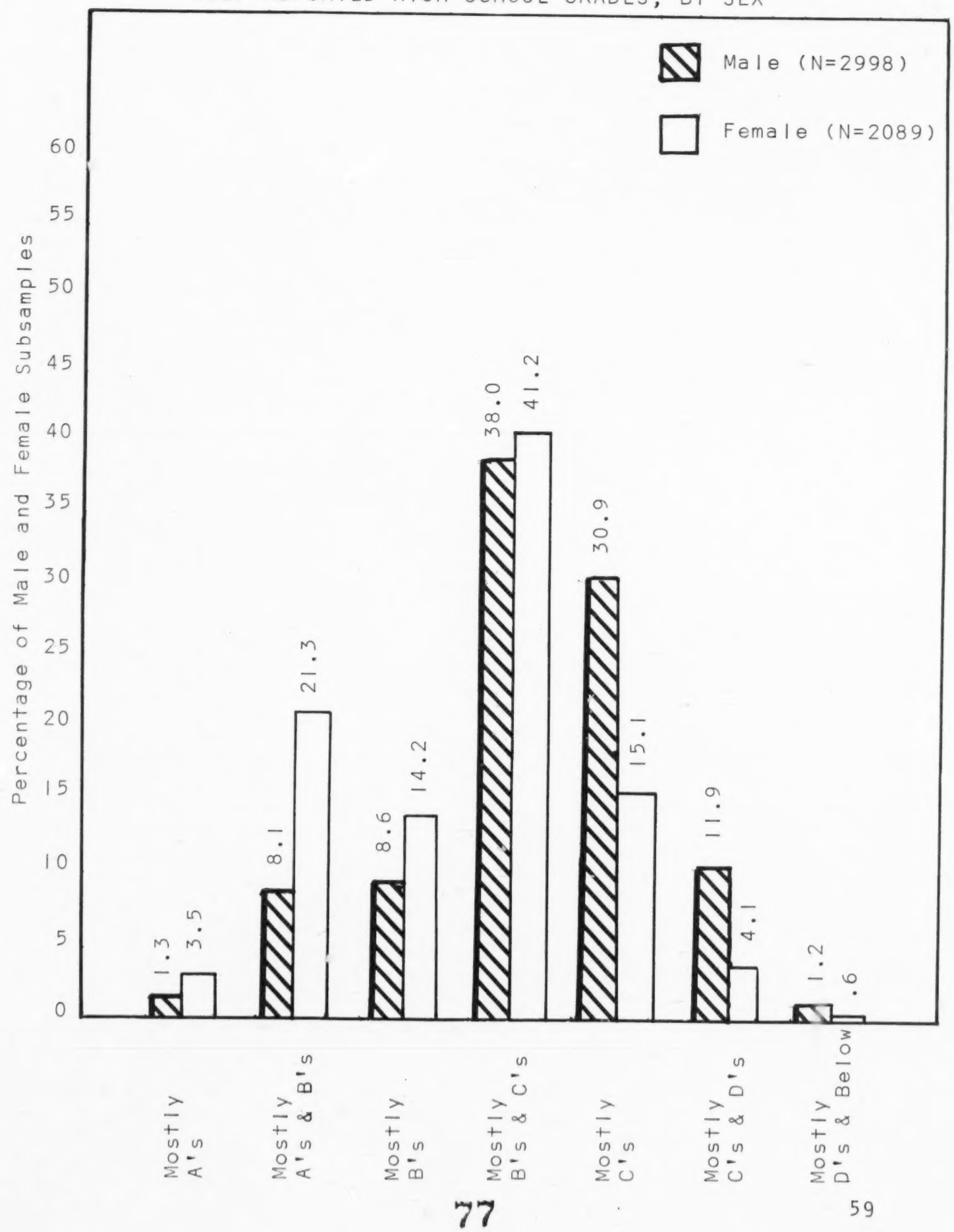
Self-reported High School Grades	Present Study	Astin, Panos, and Creager Study**		
		Entering Public 2-Year College Students	Entering Public 4-Year College Students	Entering Public University Students
Mostly A's	2.2	.8	3.8	6.8
Mostly A's and B's	13.6	9.4	25.6	33.0
Mostly B's	10.9	16.3	25.4	24.9
Mostly B's and C's	39.3	41.9	31.6	26.8
Mostly C's	24.3	29.6	12.9	8.0
Mostly C's and D's	8.7	No comparable category	No comparable category	No comparable category
Mostly D's or Below	1.0	1.9	.7	.4
TOTAL	100.0	99.9	100.0	99.9

*(Astin, Panos, and Creager, 1967)

**It was necessary to collapse some of the grades reported in the Astin, Panos, and Creager study to conform to the fewer number of grade categories used in the present survey.

FIGURE IV-2

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SELF-REPORTED HIGH SCHOOL GRADES, BY SEX



When high school grades are examined, controlling for the occupational service area of each respondent, certain differences between service areas are evident. Inspection of Table 4.2 leads to the inference that most of these differences can be explained on the basis of sex. The service areas of health occupations, home economics, and business and office have proportionately greater numbers of students concentrated in the highest grade categories; each of these areas respectively is composed of the following percentages of women: 92.2 percent, 87.0 percent, and 62.3 percent. The other four service areas, technical, trade and industry, vocational agriculture, and distributive education, are made up respectively of 93 percent men, 91 percent men, 77 percent men, and 64 percent men. There is a definite tendency for each of these areas to have respondents with grades skewed toward the lower grade categories. If the three program areas in which women constitute a majority are compared, it appears quite clear that health occupations have the more able students, at least as measured by high school grades.[2] Among those service areas dominated by male students, the absence of clear-cut differences does not permit a specific conclusion concerning self-reported high school grades.

HIGH SCHOOL EXTRACURRICULAR ACTIVITY

Another variable which has received a great deal of research attention is the amount of extracurricular activity pursued by college students while in high school. Richards and Braskamp (1967) indicate that two-year college students tend to be less talented regardless of the definition of talent; that is, they have fewer nonacademic (extracurricular) as well as academic accomplishments.

A variety of methodological approaches have been employed as measures of extracurricular activities. For example, Richards and Braskamp (1967) and Panos (1966) requested that their respondents specifically indicate which ones of a number of possible accomplishments applied to them. The present study relied on a question which elicited a general indication of the student's self-perceived involvement in extracurricular activity. The responses to this question, by total sample and sex subgroups, are portrayed in Figure IV-3.

Only about 20 percent of 5,032 occupational students felt they were above average as to extracurricular activities. This figure is similar to that reported by Panos (1966) concerning high

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[2] It must be emphasized, however, that much of the training on the post-secondary level does not require the kind of verbal skills which result in higher grades in high school.

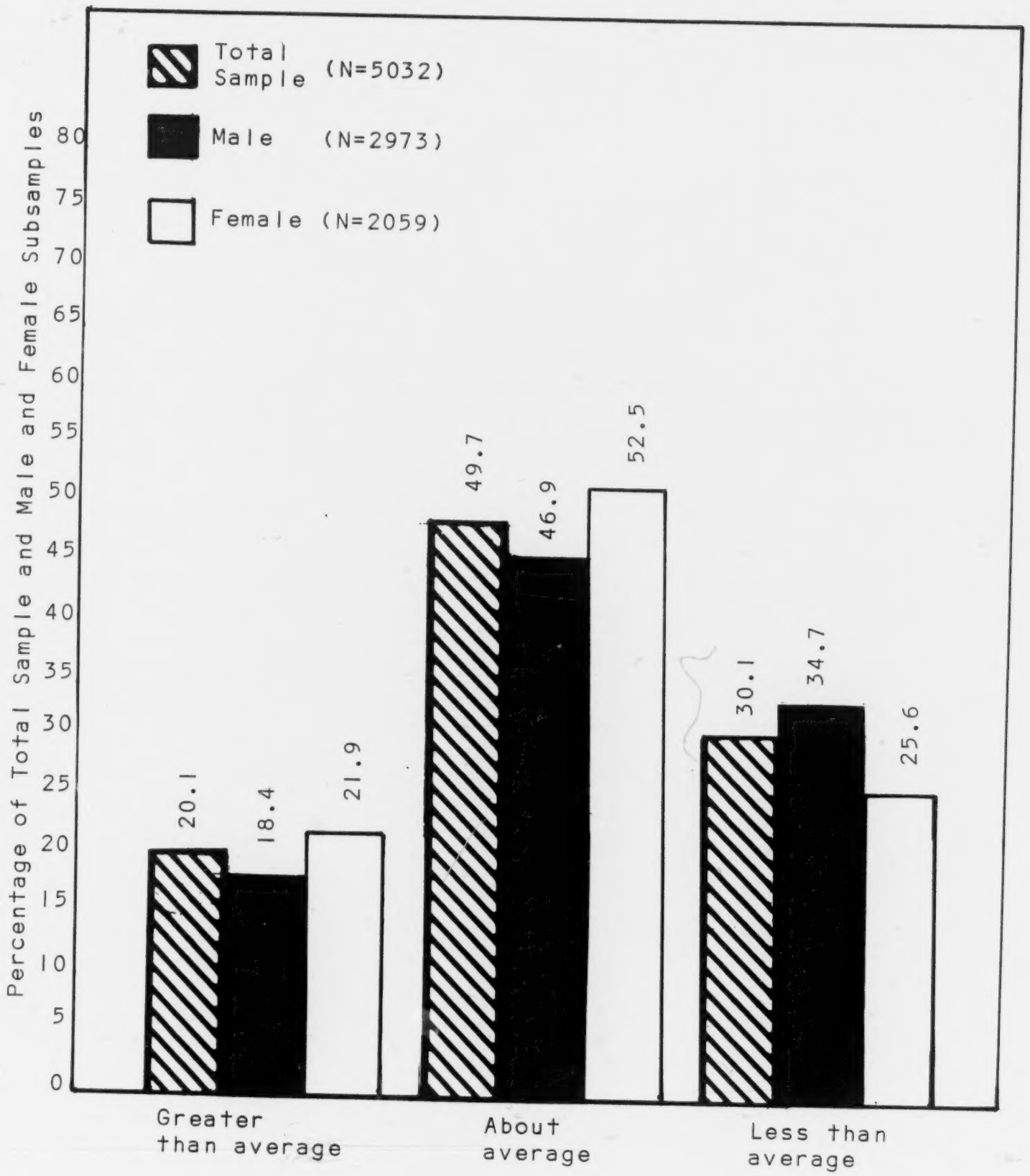
TABLE 4.2

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SELF-REPORTED HIGH SCHOOL GRADES, BY SERVICE AREA

Self-reported High School Grades	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Mostly A's	3.1	1.9	3.2	3.3	1.3	1.5	0.0
Mostly A's and B's	14.7	8.8	27.7	12.0	9.9	8.5	11.2
Mostly B's	11.5	8.7	15.8	15.2	8.9	8.7	14.7
Mostly B's and C's	41.1	38.5	36.2	44.6	39.0	38.7	36.4
Mostly C's	21.8	31.7	13.9	22.8	28.5	28.7	30.8
Mostly C's and D's	7.0	9.9	2.9	1.1	10.8	12.7	6.3
Mostly D's and Below	0.8	0.6	0.3	1.0	1.6	1.2	0.6
TOTAL (Number)	100.0 (1720)	100.1 (161)	100.0 (690)	100.0 (92)	100.0 (869)	100.0 (1407)	100.0 (143)

FIGURE IV-3

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO PARTICIPATION IN HIGH SCHOOL EXTRACURRICULAR ACTIVITIES, BY TOTAL SAMPLE AND SEX



school participation in extracurricular activities by junior college students in general. Also in agreement with Panos' data, the females in the present study appear not only to have been academically superior as high school students, but also to have been more active than males in school-related activities of an extra-classroom nature.

What is the relationship between high school extracurricular level and occupational service area? The most apparent generalization evident from examining Figure IV-4 is that the service areas dominated by males tend to be lower as to high school extracurricular participation than the female-dominated service areas; the converse is true as far as the females are concerned. As such, the general conclusion that the women composing the sample are more likely to be academically talented and extracurricularly active than the male respondents seems to be supported by these data.

HIGH SCHOOL COURSE PROFILE

Findings will now be presented on the high school course backgrounds and preferences of junior college students who have already selected their post-secondary occupational program of study.

A course preference profile has been constructed based on the responses to the following question: "What course in high school did you enjoy most?" Figure IV-5 depicts the high school course preferences of the occupational students classified as to the service area in which each was majoring; only findings relative to the four most frequently cited courses by students of each area are reported.

Business and office and distributive education have the most similar profiles; both are composed of the same courses--English, math, history, and business. However, whereas greater proportions of the students in business and office preferred English and math, these subjects are ranked third and fourth by the distributive education students, who preferred history and business. Students enrolled in health occupations curricula also include English, math, and history among the four most popular subjects listed, but their most preferred course is biology. Among the home economics majors, history and English continue to receive most preferred evaluations, with art and home economics ranking third and fourth. Respondents in technical education and trade and industry select industrial arts and math as their first and second most preferred subjects. History also ranks among the four most popular subjects for each of these two service areas; however, it was ranked third by the trade and industrial students and fourth by respondents majoring in technical education. Vocational agriculture students

FIGURE IV-4

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO PARTICIPATION IN HIGH SCHOOL EXTRACURRICULAR ACTIVITIES, BY SERVICE AREA

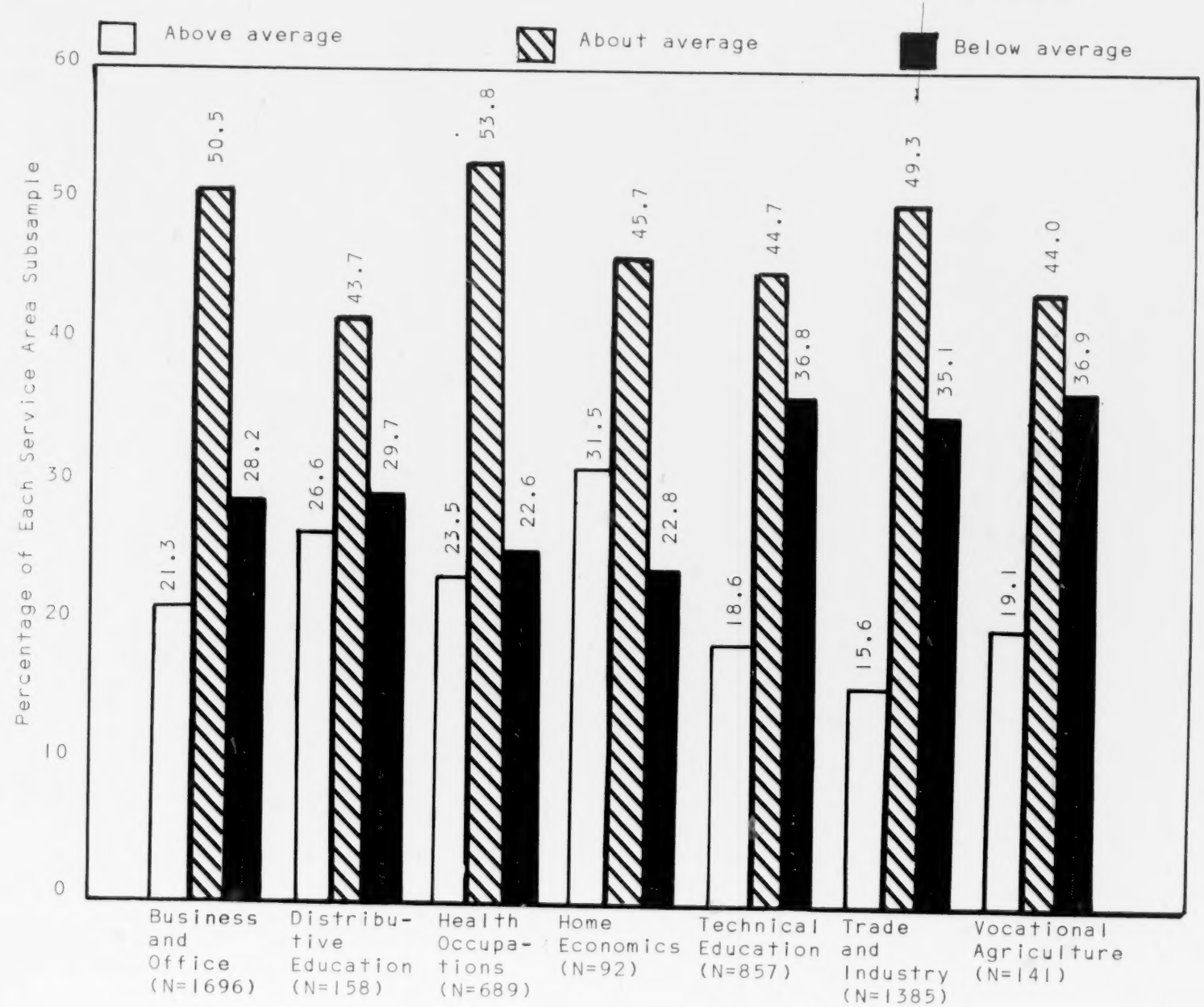
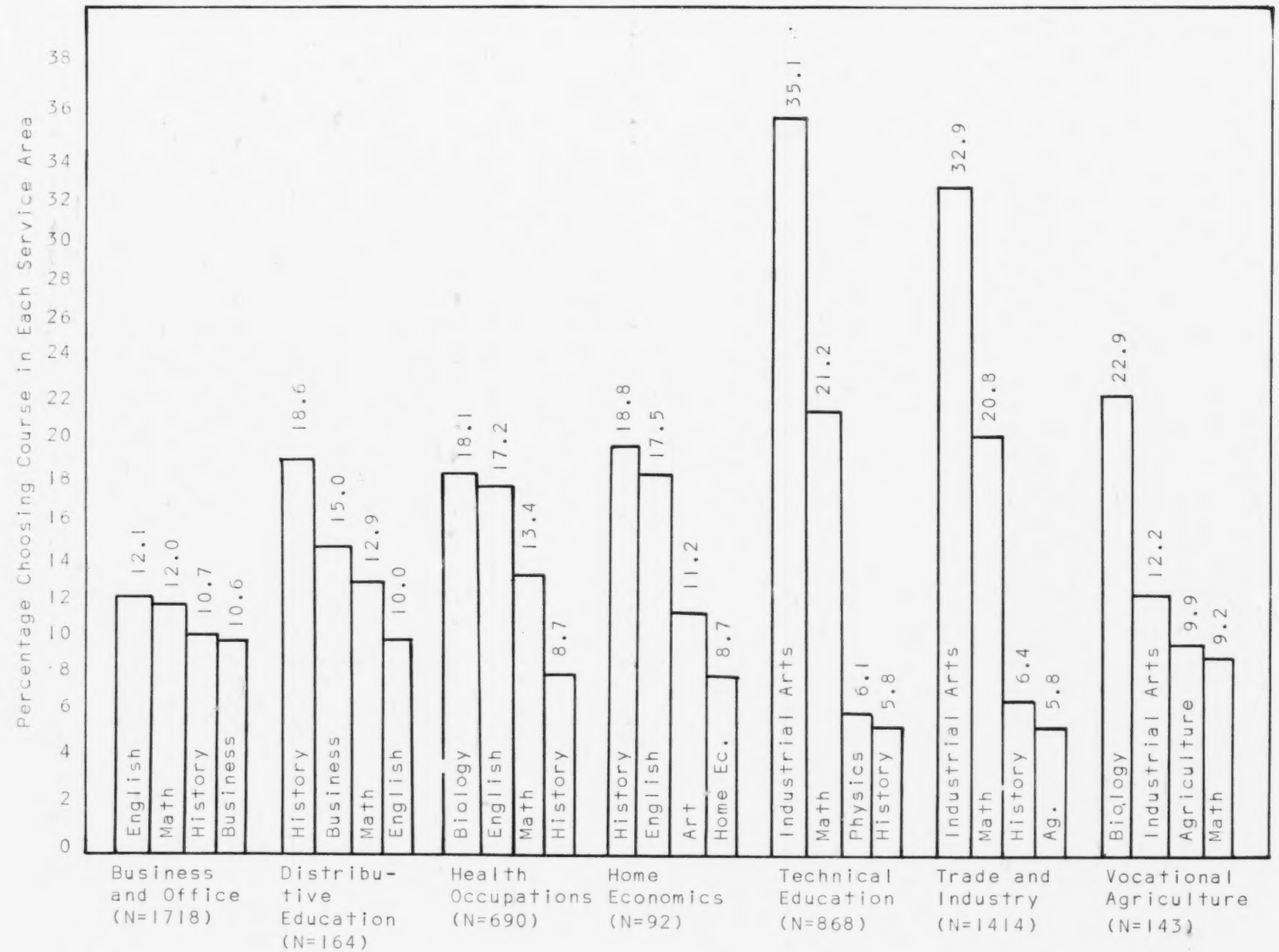


FIGURE IV-5

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO THE FOUR MOST PREFERRED HIGH SCHOOL COURSES, BY SERVICE AREA



include both biology and agriculture, but a strong technical interest is revealed by the inclusion of industrial arts and math among the four most favorite high school subjects.

In general, these profiles are distinctive enough to provide some differentiation among service area students. It appears the preferred courses are fairly reasonable choices in terms of necessary preparation for greater success in the service area in which the students have decided to concentrate. However, as will be discussed below, and with the notable exception of business and office majors, most of the junior college students did not have a great deal of specific high school preparation for the vocational-technical service area in which they are presently enrolled.

One implication of these findings is that the program areas entered by most of these students were not selected early in the students' high school careers. This contention is supported by the findings of the present research that nearly one-third and one-fourth of the students decided upon their occupational choices after leaving high school and during their senior year in high school, respectively.[3] When they did make their program area selection, however, that choice frequently reflected the courses preferred as high school students. Since these data were derived from a retrospective oriented question, it is possible many of the students identified as most preferred those courses which would be compatible with their present program interests in order to reduce dissonance between past and present interests. This argument is vitiated somewhat when one takes into account that a person will likely remember most favorably the course in which he received the best grades.

As implied above, the majority of students in each of the service areas had taken few courses (two semesters or less) in vocational-technical education while in high school. Only in the program areas of business and office, home economics, and technical education did more than one-third of the respondents have three or more high school vocational-technical courses related to their eventual choice of program area on the junior college level. With the possible exception of many business and office education students, occupational training at the junior college does not appear to be a continuation of training initiated in high school. This conclusion is quite convincingly supported by the data reported in Table 4.3.

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[3]These data will be discussed in greater detail in Chapter VI. The final chapter considers more fully the implications of these results.

TABLE 4.3

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO NUMBER OF HIGH SCHOOL COURSES TAKEN RELATED TO PRESENT SERVICE AREA, BY SERVICE AREA

Number of Semesters of Related Courses	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
None	15.4	62.7	76.8	31.5	27.0	36.9	66.2
One	16.9	12.0	10.3	16.3	10.6	11.8	2.1
Two	20.6	13.3	5.0	10.9	20.9	18.9	4.2
Three	9.1	3.2	2.9	17.4	9.7	7.7	3.5
Four or More	38.0	8.9	5.0	23.9	31.8	24.7	23.9
TOTAL (Number)	100.0 (1714)	100.1 (158)	100.0 (681)	100.0 (92)	100.0 (862)	100.0 (1400)	99.9 (142)

What explanations can be given for the above findings? There are two which come to mind. It is possible that the high schools attended by a majority of the students in the sample did not offer comprehensive vocational-technical programs and they were precluded from taking extensive course work in a particular program area. This supposition can be examined up to a point by considering data relative to the types of high schools from which the students graduated (see Table 4.4).

Although each of four program areas (health occupations, home economics, technical, vocational agriculture) has around one-third of their students whose high school education was pursued in a general academic high school (offers vocational programs in less than three areas), from about one-half to three-fifths of the students in each program area attended comprehensive high schools. That is, they graduated from high schools which offered at least three areas of vocational education, in addition to general-academic programs. This seems to suggest that the lack of program offering does not totally explain why a majority of the students in each service area had taken few high school occupational courses.

Another possible explanation may be that high school students who complete extensive course work in vocational-technical education consider their training to be terminal at that level and, consequently, are not represented at the junior college level. Support for this position is found in recently published SCOPE data (Tillery, Donovan, and Sherman, 1969). The SCOPE Grade Eleven Profile for selected items of the 1968 Questionnaire includes information on the high school course considered most interesting to students, classified as to their educational aspirations. Almost overwhelmingly, those students who aspired only to graduate from high school or to leaving high school prior to graduation chose as most interesting a vocational-technical course. Those aspiring to junior college or some special vocational-technical school were also more likely to select a vocational-technical course as opposed to students aspiring to graduate from a four-year college or to achieve post-graduate training. If it can be assumed that aspirations are related to behavior, a proportionately greater number of students in high school vocational-technical programs, as contrasted with other programs, do not pursue further education in junior colleges or other types of post-secondary educational institutions.

SUMMARY

The vocational-technical junior college students do not differ greatly in self-reported high school grades from junior college students in general. However, they do reflect the differences usually found between junior college students and students in four-year colleges and universities. Females appear to be clearly

TABLE 4.4

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO TYPES OF HIGH SCHOOLS FROM WHICH GRADUATED, BY SERVICE AREA

Type of High School	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Comprehensive	59.8	61.0	49.8	49.5	53.2	58.5	50.0
General-Academic	24.0	18.9	31.3	36.6	32.1	27.5	38.0
Vocational-Technical	2.6	1.9	1.2	4.3	2.0	2.2	2.1
Area Vocational-Technical	1.2	0.0	0.7	0.0	1.2	2.1	0.7
Private (Church related)	9.5	13.8	8.4	6.5	7.5	5.3	7.0
Private (Other)	2.9	4.4	8.7	3.2	4.1	4.3	2.1
TOTAL (Number)	100.0 (1705)	100.0 (159)	100.1 (681)	100.1 (93)	100.1 (861)	99.9 (1404)	99.9 (142)

superior to males in the sample. This is reflected not only in the direct sex by high school grade comparisons but also indirectly in the comparisons between service areas dominated by females and areas dominated by males. Girls in the sample, aside from being better high school students, were also more involved in extracurricular activities. It was possible to differentiate students in the various service areas on the basis of preferred high school course profiles; further, it appeared that courses appearing in the profiles were reasonable choices in terms of needed preparation for success in chosen program areas even though on the basis of available evidence it appeared that program areas were chosen late in the high school period or following it. This finding was interpreted to mean that program areas were chosen primarily on the basis of preexisting general interests.

V. CONSIDERATIONS RELATING TO FAMILY AND COMMUNITY

A person is essentially a product of his social-cultural experiences. Consequently, his needs and interests can be better understood if information is available concerning those factors which have an impact upon the nature of his experiences. This chapter examines the national sample of junior college vocational-technical students as to socioeconomic background, perceived parental interest, and various community dimensions. Data in these areas should enhance the possibility of making educational programs and services more in keeping with the needs and interests of students. The final section contains a summary of basic findings.

SOCIOECONOMIC BACKGROUND

The socioeconomic background of the vocational student enrollees is examined according to specific indicators as well as a summary indicator. Discussions of the specific indicators are centered around head of household's occupation, parental educational attainments, and head of household's income. A socioeconomic index is used to summarize the level occupied by the student's family in the social class structure.

OCCUPATIONAL BACKGROUND

An important index of socioeconomic background is the occupation held by the household head in a person's family of orientation (parental family).[1] Occupational background information

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[1]Although no data are available which describe the position held by the head of household, an overwhelming majority are undoubtedly fathers of the students. One question did seek to identify the respondent's real parents during most of his life. The alternatives and the percentage of the sample who selected each choice are:

1. "They were living together." (84.3 percent)
2. "Both were dead." (0.8 percent)
3. "Father was dead, but mother was living." (3.7 percent)
4. "Mother was dead, but father was living." (1.6 percent)
5. "They were divorced." (5.6 percent)
6. "They were separated." (1.6 percent)
7. "Other" (2.4 percent)

was secured from responses to this question: "What is (was, if retired or deceased) the usual occupation of the head of household in your parental family, what is the job called, what kind of business or industry does he work in, and what does he do?" Illustrative answers were given in the questionnaire to insure greater data validity. A modification of the Socioeconomic Index developed by Alba Edwards for the U.S. Bureau of the Census (1952) was used to categorize the responses.[2]

Occupations belonging to the craftsmen, foremen, and kindred grouping were listed most frequently; more than one out of four students said their household head had a job in this category. Managerial, official, and proprietory occupations are mentioned second most frequently, being specified in about one out of six cases. Figure V-1 presents the findings for the total sample.

If the occupational groups are classified into the twofold division of white- and blue-collar workers,[3] about four out of 10 hold white-collar positions; six out of 10 are blue-collar workers.

Figure V-2 shows the percentage distribution of the members of the white and black subgroups across nine major occupational groupings. One summarizing statement is readily apparent: comparatively speaking, the occupational background of the white students are skewed toward those jobs ranking at the upper end of the occupational structure; the converse pattern is characteristic of the black students.

Junior colleges have been viewed as having a democratizing effect, making available greater opportunities for members of the lower socioeconomic classes to pursue a higher education (Roueche, 1968b). In some respects, the data reported above are supportive of this viewpoint, for members of both major racial groups, and particularly in the case of blacks. This subject will be examined in much greater detail in the final chapter.

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[2]The category designated as "laborers, except farm and mine" was altered to include farm and mine. The "farm laborers and foremen" category was deleted. In the absence of "private household workers," this category was also deleted.

[3]The occupational groups assigned to the white-collar category are: professional and technical; managers, officials, and proprietors; clerical; and sales. The blue-collar division is composed of the following: craftsmen and foremen; operatives; service; farmers; and laborers.

FIGURE V-1

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO OCCUPATION OF THE HEAD OF HOUSEHOLD IN PARENTAL FAMILY, BY TOTAL SAMPLE

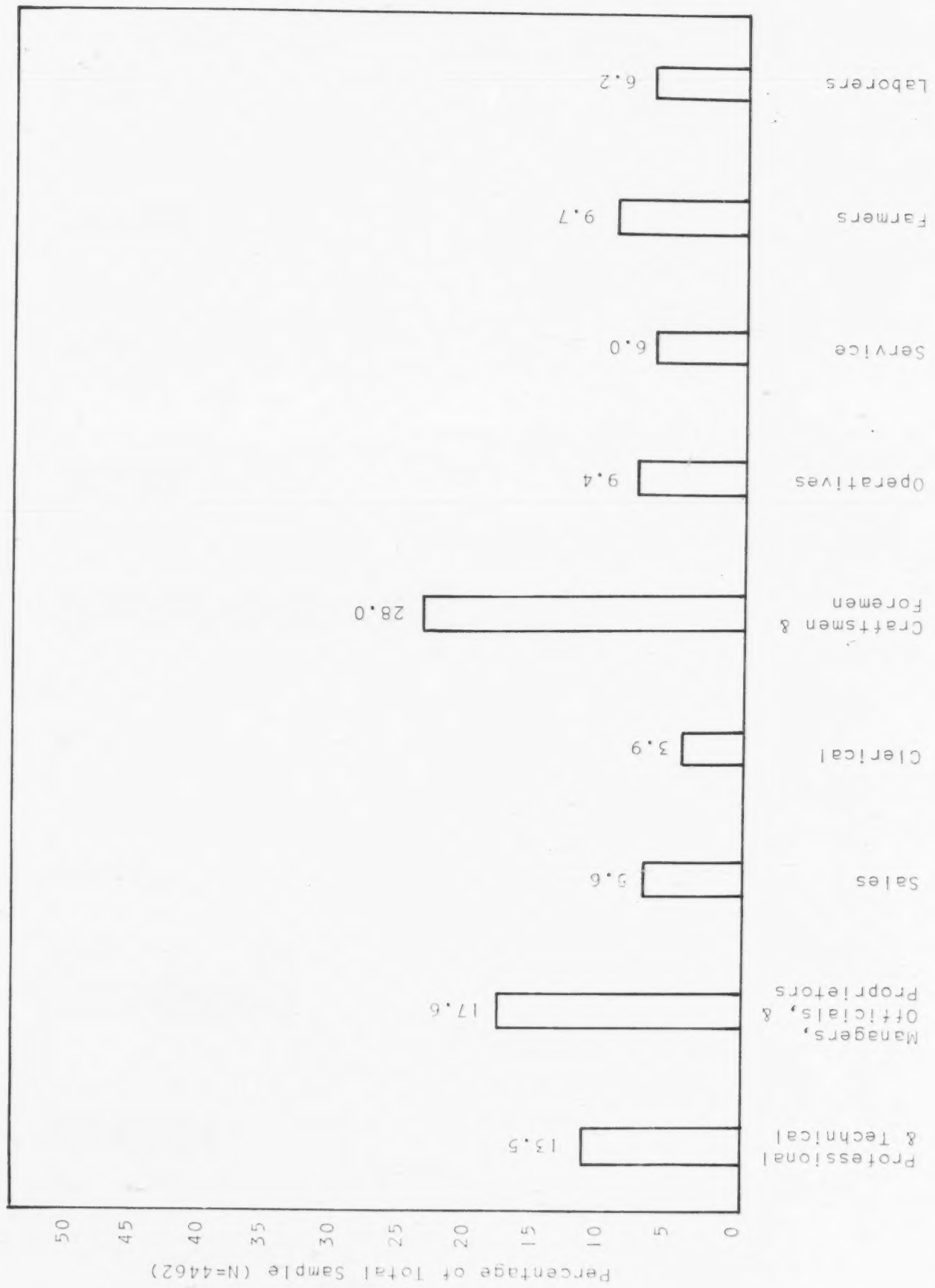
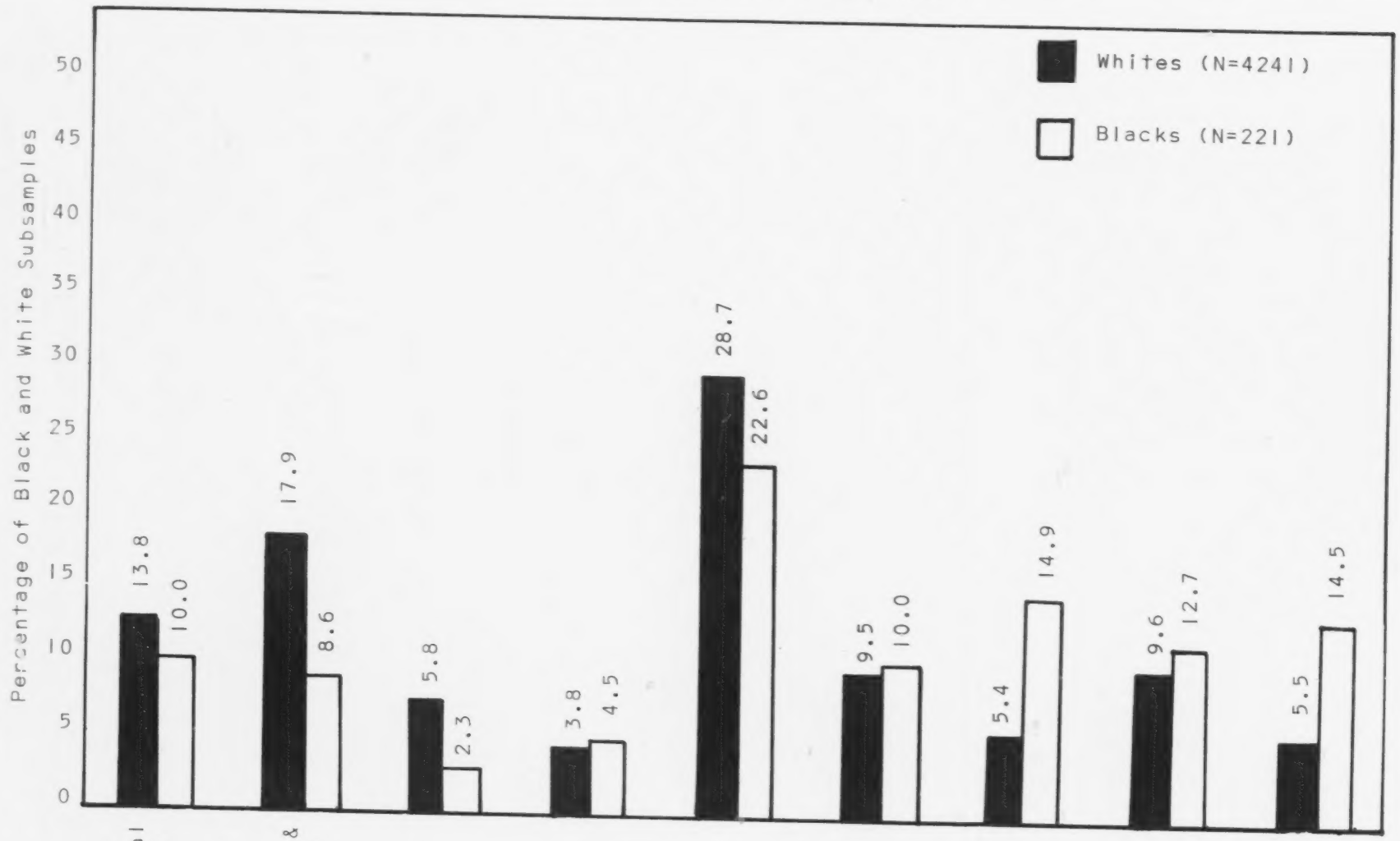


FIGURE V-2

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO OCCUPATION OF THE HEAD OF HOUSEHOLD IN PARENTAL FAMILY, BY BLACK AND WHITE SUBGROUP



EDUCATIONAL BACKGROUND

Data on the educational attainments of the respondents' fathers and mothers are reported in Figure V-3. This figure reveals slightly more than one-third and two-fifths of the mothers and fathers did not graduate from high school. The number of women who are at least high school graduates is more than 10 percent greater than the number of men achieving the same educational level. Minor variations exist between the number of fathers and mothers who have at least some college training.

It has already been reported that two-year colleges attract smaller proportions of students from high socioeconomic backgrounds than do other types of post-high school institutions (Cross, 1968). Furthermore, there is some indication that this finding is more true for public two-year colleges than for private two-year colleges. This leads to a question relative to how the educational background of community-junior college occupational students compare with other student populations. Results of a significant study by Astin, Panos, and Creager (1967) are compared with appropriate findings of the present research (see Tables 5.1 and 5.2).

Regardless of which educational background variable is considered (father's education or mother's education), the occupational students as a group have parents with less education than is the case for the four-year college, university, two-year private college, and two-year public college student groups. The comparison suggests further that the educational background of the vocational-technical students is most similar to that of the two-year public college students who participated in the nationwide survey by Astin, Panos, and Creager. This is as expected since the students in the present study's sample are also enrolled in two-year public institutions.

Table 5.3 describes the educational levels of the occupational students' fathers according to racial group memberships. It comes as no surprise that the distribution of the white fathers tends to be curvilinear, whereas those of the other two racial groups approaches being linear. In particular, the black respondents are concentrated toward the lower educational levels.

INCOME BACKGROUND

Additional information regarding the family background of the vocational-technical students was derived in the form of head of household's income data. As shown in Table 5.4, approximately the same percentage (about 12 percent) of the heads of households have yearly incomes in the two lowest categories and the two highest categories. Nearly 46 percent of the sample receive salaries

FIGURE V-3

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO THE EDUCATION OF THEIR FATHERS AND MOTHERS, BY TOTAL SAMPLE

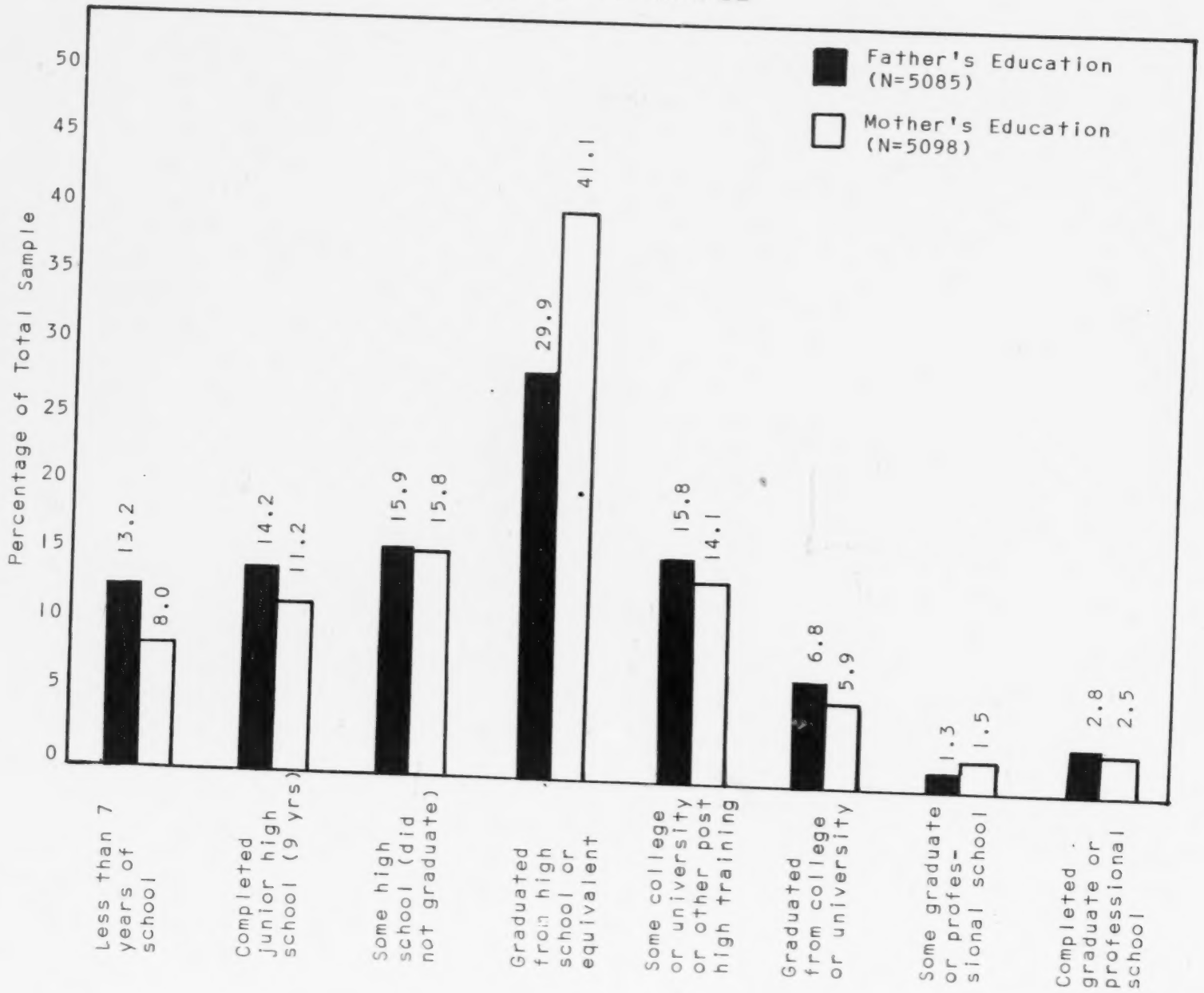


TABLE 5.1

PERCENTAGE COMPARISON OF THE EDUCATION RECEIVED BY FATHERS OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN THE PRESENT STUDY WITH FATHER'S EDUCATION OF STUDENT GROUPS IN THE ASTIN, PANOS, AND CREAGER STUDY*

Father's Education	Present Study**	Astin, Panos, and Creager Study			
		4-year College Students	University Students	2-year Public College Students	2-year Private College Students
Grammar school or less	13.2	9.2	7.2	12.7	10.1
Some high school	30.1	14.6	12.9	21.3	20.1
High school graduate	29.9	28.9	27.4	31.7	31.2
Some college	15.8	18.9	20.0	19.1	17.1
College degree	10.9	28.5	32.5	15.3	21.5
TOTAL (Number)	99.9 (5098)	100.1 (61433)	100.0 (122531)	100.1 (17817)	100.0 (5084)

*(Astin, Panos, and Creager, 1967)

**It was necessary to collapse some of the educational categories in the present study to better approximate the categories used in the Astin, Panos, and Creager study.

TABLE 5.2

PERCENTAGE COMPARISON OF THE EDUCATION RECEIVED BY MOTHERS OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN THE PRESENT STUDY WITH MOTHER'S EDUCATION OF STUDENT GROUPS IN THE ASTIN, PAÑOS, AND CREAGER STUDY*

Mother's Education	Present Study**	Astin, Panos, and Creager Study			
		4-year College Students	University Students	2-year Public College Students	2-year Private College Students
Grammar school or less	8.0	5.7	4.5	8.5	6.4
Some high school	27.0	12.4	11.0	19.1	16.2
High school graduate	41.1	41.8	41.9	43.2	44.3
Some college	14.1	20.2	22.1	18.7	18.4
College degree	9.9	20.0	20.5	10.5	14.7
TOTAL (Number)	100.1 (5098)	100.1 (61433)	100.0 (122531)	100.0 (17817)	100.0 (5084)

*(Astin, Panos, and Creager, 1967)

**It was necessary to collapse some of the educational categories in the present study to better approximate the categories used in the Astin, Panos, and Creager study.

TABLE 5.3

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO RACE, BY FATHER'S EDUCATION

Father's Education	Race		
	White	Black	Oriental
Less than 7 years of school	11.8	29.4	22.9
Completed junior high school (9 years)	13.8	20.4	15.7
Some high school (did not graduate)	15.9	17.7	10.8
Graduated from high school or equivalent	30.9	17.7	27.7
Some college or university or other post-high training	16.6	5.3	13.3
Graduated from college or university	6.9	6.0	6.0
Some graduate or professional school	1.4	1.5	1.2
Completed graduate or professional school	2.8	1.9	2.4
TOTAL (Number)	100.1 (4631)	99.9 (265)	100.0 (83)

TABLE 5.4

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY HEAD OF HOUSEHOLD'S INCOME

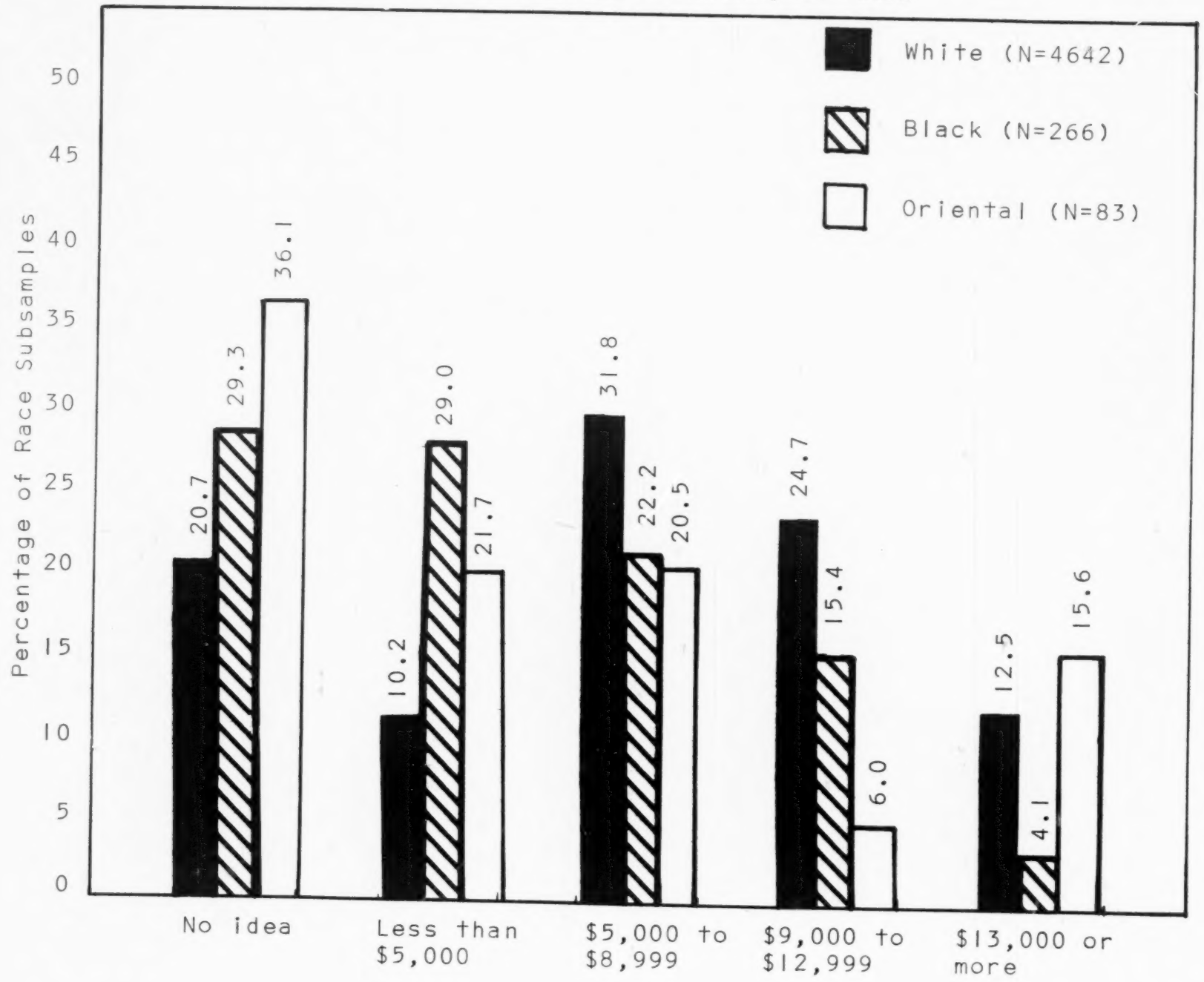
Head of Household's Income	Number	Percent
I have no idea	1,097	21.5
Less than $3,000	172	3.4
$3,000 to $4,999	425	8.3
$5,000 to $6,999	770	15.1
$7,000 to $8,999	810	15.9
$9,000 to $10,999	750	14.7
$11,000 to $12,999	459	9.0
$13,000 to $14,999	225	4.4
$15,000 and over	388	7.6
TOTAL	(5096)	99.9

in the range extending from $5,000 to $10,999; this group of respondents is almost equally divided among the three income categories found in this range.

It was shown previously that the occupational groupings to which the students' fathers belonged varied significantly when white and black students were compared. The household heads of the white respondents pursued a disproportionate number of the more highly skilled and prestigious jobs. As a result, the income disparities between these two subgroups, as revealed in Figure V-4, could have been predicted. It should also be noted that the oriental students came from families in which the income of the parental head, on the average, fell between the whites and blacks, being closer to the former than the latter.

FIGURE V-4

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO HEAD OF HOUSEHOLD'S INCOME, BY RACE



SOCIOECONOMIC STATUS

Based on the variables of income, education, and occupational prestige, a socioeconomic status index was developed specifically for this study.[4] This index serves as a summation of the respondent's socioeconomic position; the sample is classified into six categories, extending from Status Level I (highest) to Status Level VI (lowest). Initially, findings on socioeconomic status are presented by total sample and sex subgroups (see Figure V-5).

Whether by composite sample or sex, roughly four out of five students have a family background equivalent to Status Levels III, IV, or V; these status levels are roughly equal in size. Of the remaining sample members about twice as many are in Status Level VI as are in I and II combined. For each of these socioeconomic groups, however, the proportion of males and females is quite similar.

The distribution patterns evidenced when specific indicators of socioeconomic background were compared by racial groups also exist when the relationships between racial groups and socioeconomic index are explored (see Figure V-6).

In general, these findings supported by the data presented earlier on occupational background, educational background, and father's income suggest the conclusion that public community colleges have provided opportunity to many people who otherwise would not have attended a post-secondary education institution. The data also suggest, however, that persons from the lower extremes of the class structure are disproportionately underrepresented in junior college vocational-technical programs.

PERCEPTIONS OF PARENTAL INTEREST

Parental attitudes as perceived by offspring have a marked effect upon them. Knowledge of this topic is important in understanding student motivations. Each respondent in the occupational student sample was asked to indicate how important it was to his parents that he study hard, receive good grades in school, and find the work he wants; the response distributions for the total sample are depicted in Figure V-7.

Between about two-fifths and three-fourths of the subjects feel their parents accord "very important" or "quite important" evaluations to each of the questions. The responses to the "study hard" and "good grades" items are quite similarly divided among

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[4]A detailed discussion of the Index is in Appendix "G."

FIGURE V-5

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SOCIOECONOMIC LEVEL, BY TOTAL SAMPLE AND SEX

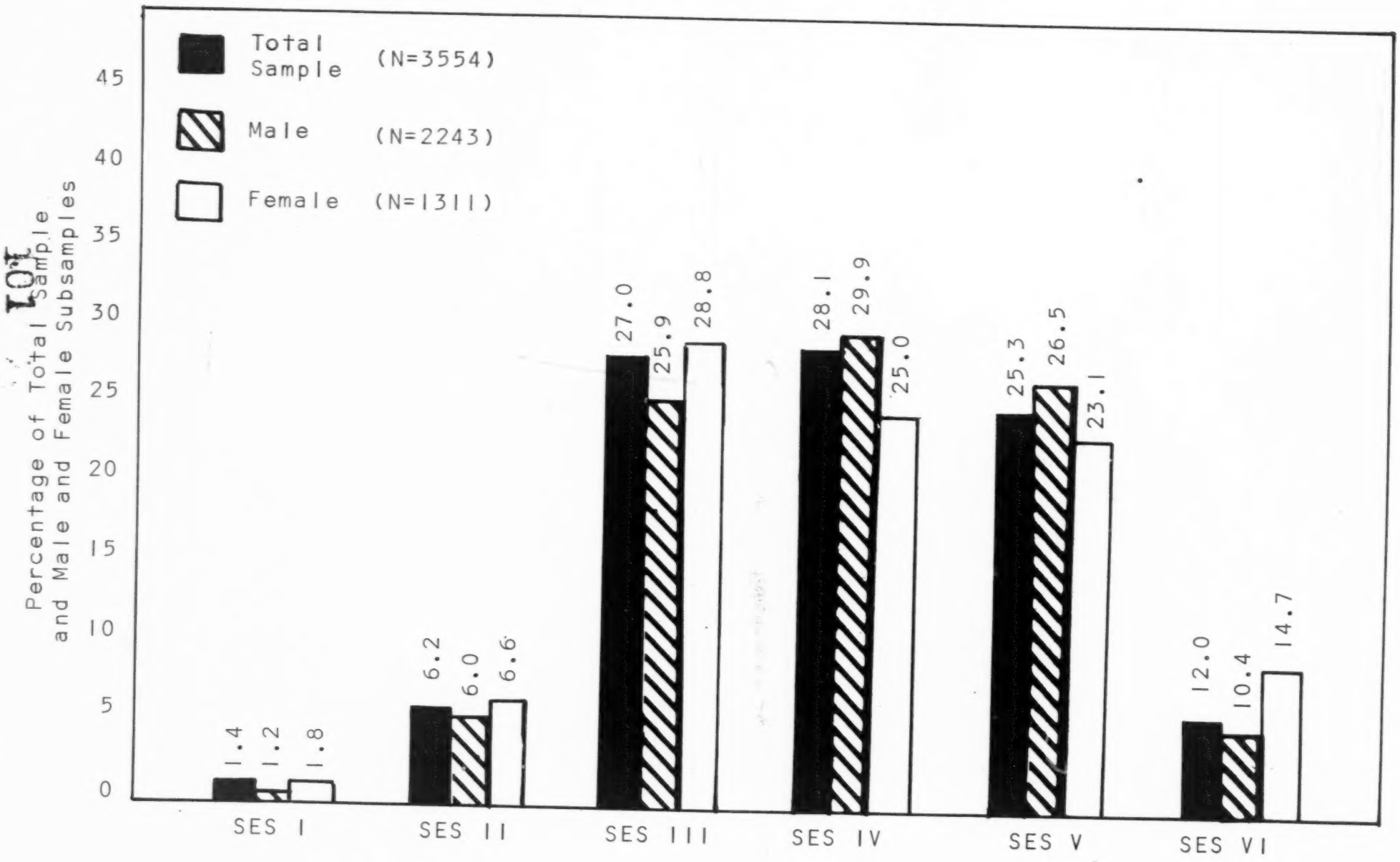


FIGURE V-6

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SOCIOECONOMIC LEVEL, BY RACE

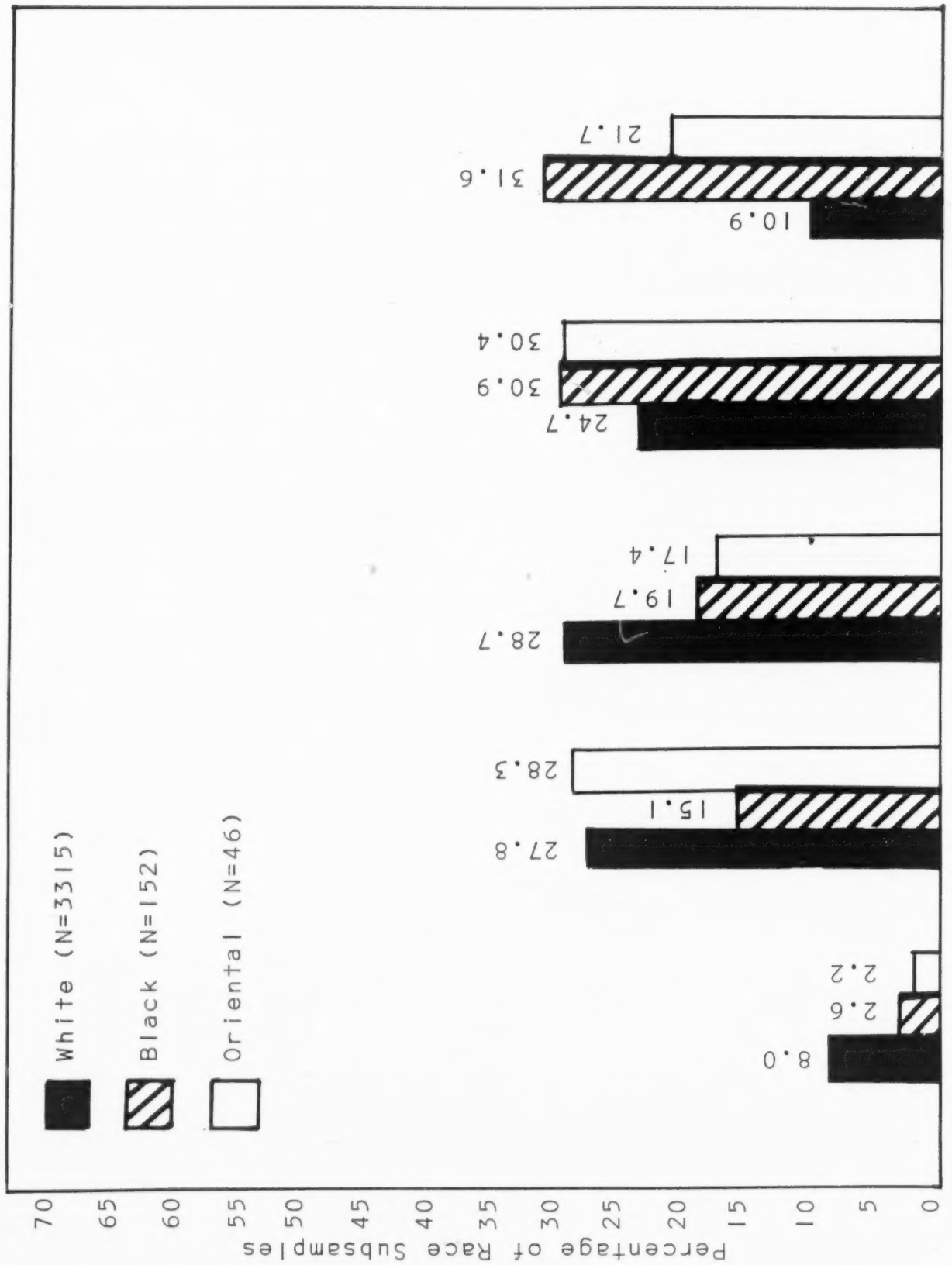
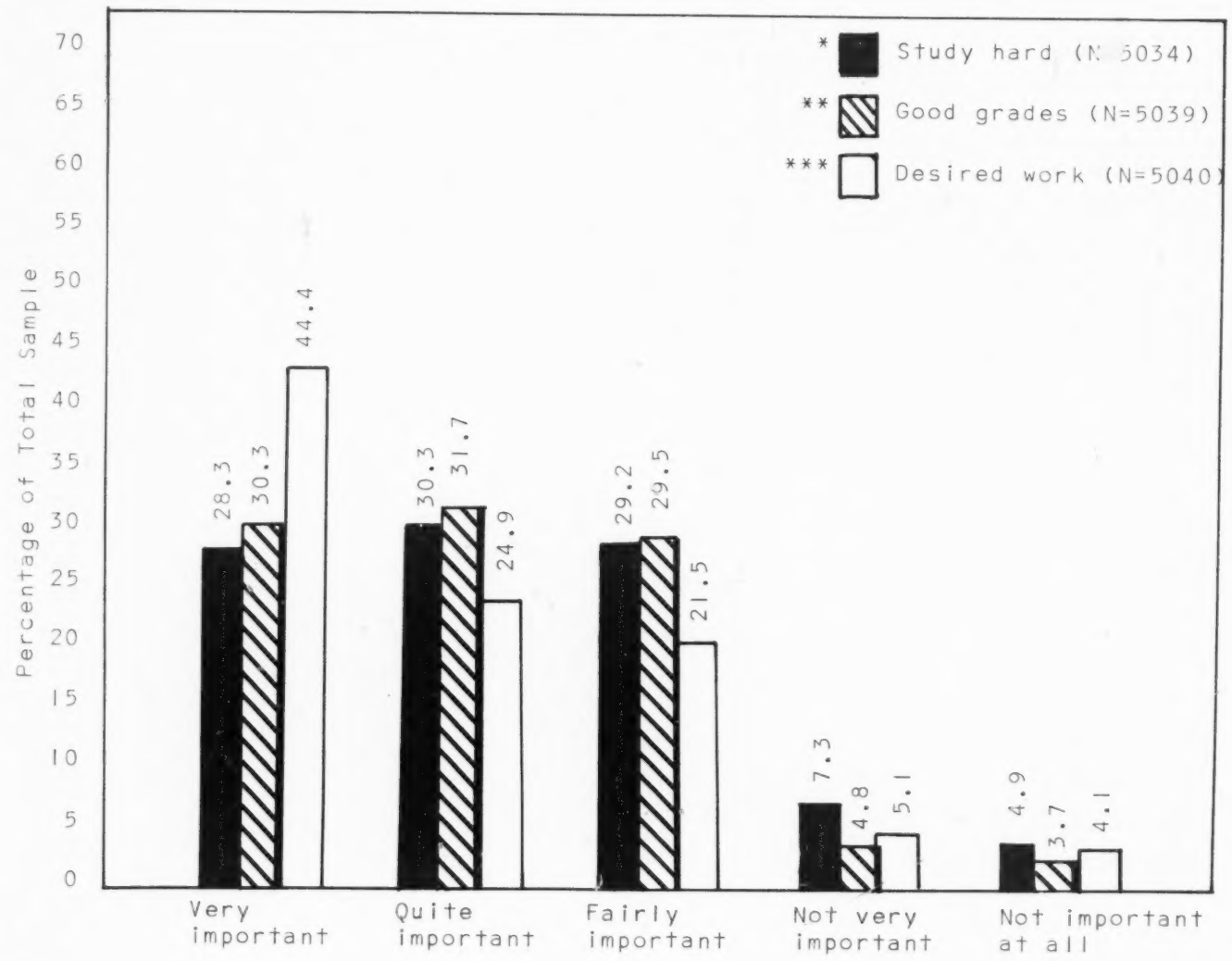


FIGURE V-7

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO THE RELATIVE IMPORTANCE THEY PERCEIVE THEIR PARENTS ATTRIBUTING THREE PARENTAL INTEREST AREAS, BY TOTAL SAMPLE



*"How important is it to your parents that you study hard?"
**"How important is it to your parents that you receive good grades?"
***"How important to your parents is your success in finding the work you want?"

the five response alternatives; a significantly greater number of students feel their parents attribute greater importance to "desired work."

Table 5.5 presents the findings by racial groups. It is significant that the respondents in the two minority groups tend to perceive parental attitudes, regardless of area considered, as reflecting a greater importance than is the case for the white students. This is especially the case for the members of the black subgrouping.

Certain inconsistencies appear to exist when the responses of the males and females are compared in Table 5.6. With reference to the "good grades" and "study hard" parental interest items, a slightly greater proportion of the males feel their parents attribute more importance to each area. In contrast, the largest difference characterizes a comparison between the male and female answers regarding parental attitude toward the respondent finding the work he wants; proportionately more females feel their parents accord "very important" or "quite important" opinions to this activity.

It can be predicted that a direct positive relationship exists between the socioeconomic level of the student's parental family and the relative amount of importance they perceive their parents attaching to each area. As revealed in Table 5.7, the data support this prediction as it pertains to "desired work." In addition, essentially the same pattern resulted from the answers to each of the other parental interest items.

By and large, these findings indicate a significant number of students perceived their parents as providing the kind of attitudinal support which should maximize the chances for successful academic and work accomplishments.

COMMUNITY BACKGROUND AND FUTURE COMMUNITY ORIENTATION

This section adds to our understanding of the vocational students by discussing their community background, the length of time they have lived in their present place of residence, and their future intentions regarding whether or not they plan to remain in their present community.

COMMUNITY BACKGROUND

The size of the residential area in which a person has spent most of his life, particularly during the early formative years, generally has a decided effect upon his attitudes, values, and beliefs. Hence, it is of some relevance that the respondents in

TABLE 5.5

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO THE RELATIVE IMPORTANCE THEY PERCEIVE THEIR PARENTS ATTRIBUTING THREE PARENTAL INTEREST AREAS, BY RACE

Parental Interest Item	Race		
	White	Black	Oriental
"How important is it to your parents that you study hard?"	*1 = 57.7 2 = 30.2 3 = 12.1 (N = 4617)	1 = 73.6 2 = 14.5 3 = 11.9 (N = 262)	1 = 75.3 2 = 20.0 3 = 4.7 (N = 85)
"How important is it to your parents that you receive good grades in school?"	1 = 61.1 2 = 30.5 3 = 8.4 (N = 4622)	1 = 77.8 2 = 15.7 3 = 6.5 (N = 261)	1 = 69.4 2 = 24.7 3 = 5.9 (N = 85)
"How important to your parents is your success in finding the work you want?"	1 = 69.2 2 = 21.7 3 = 9.2 (N = 4625)	1 = 76.9 2 = 15.0 3 = 8.1 (N = 260)	1 = 70.2 2 = 22.6 3 = 7.2 (N = 84)

*1 = very important or quite important
2 = fairly important
3 = not very important or not important at all

TABLE 5.6

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO THE RELATIVE IMPORTANCE THEY PERCEIVE THEIR PARENTS ATTRIBUTING THREE PARENTAL INTEREST AREAS, BY SEX

Parental Interest Item	Sex	
	Male	Female
"How important is it to your parents that you study hard?"	*1 = 58.6 2 = 28.1 3 = 13.2 (N = 2968)	1 = 58.6 2 = 30.8 3 = 10.7 (N = 2066)
"How important is it to your parents that you receive good grades in school?"	1 = 63.5 2 = 28.1 3 = 8.4 (N = 2973)	1 = 59.9 2 = 31.5 3 = 8.6 (N = 2066)
"How important to your parents is your success in finding the work you want?"	1 = 66.7 2 = 23.8 3 = 9.6 (N = 2971)	1 = 73.2 2 = 18.2 3 = 8.7 (N = 2069)

*1 = very important or quite important
2 = fairly important
3 = not very important or not important at all

TABLE 5.7

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO THE RELATIVE IMPORTANCE THEY PERCEIVE THEIR PARENTS ATTRIBUTING THE RESPONDENT'S SUCCESS IN FINDING DESIRED WORK, BY SOCIOECONOMIC LEVEL

"How important to your parents is your success in finding the work you want?"	Socioeconomic Level		
	I & II	III & IV	V & VI
Very important or quite important	76.7	71.3	65.9
Fairly important	17.8	21.8	23.4
Not very important or not important at all	5.5	6.9	10.7
TOTAL	100.0	100.0	100.0
(Number)	(275)	(1957)	(1318)

the national sample on which this research is based be examined in terms of community background. With this goal in mind, the respondents selected one of eight alternatives which best described the size of place in which each spent most of his life. As shown in Table 5.8 the proportional range of respondents, by size of place, extends from 8.5 percent (suburb of metropolis) to 18.0 percent (town of 2,500 to 10,000 people). As such, each size of community categories is represented by a fairly large number of subjects. On the other hand, the categories representing lesser populations are disproportionately overrepresented. For example, about three-fifths of the 5,122 students spent most of their lives in places of 50,000 people or less.

Is there a relationship between size of place and the vocational-technical service area in which the respondent is enrolled? Figure V-8 reveals certain differences that characterize the comparisons between service areas. Nearly seven out of 10 vocational agriculture students spent most of their lives in places of 10,000 people or less. Over 40 percent of the majors in technical education and trade-industrial education lived in communities with 10,000 or less inhabitants. Slightly more than 40 percent of the

TABLE 5.8

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY SIZE OF COMMUNITY WHERE RESPONDENT SPENT MOST OF HIS LIFE

Size of Community	Number	Percent
Metropolis with half a million or more people	553	10.8
Suburb of such a metropolis	436	8.5
City of 100,000 plus to 500,000 people	746	14.6
City of 50,000 plus to 100,000 people	448	8.7
City of 10,000 plus to 50,000 people	853	16.7
Town of 2,500 to 10,000 people	923	18.0
Town under 2,500 people	494	9.6
Open country	669	13.0
TOTAL	(5122)	99.9

business-office and distributive education respondents had lived extended periods in cities with populations exceeding 100,000 inhabitants.

LENGTH OF RESIDENCE IN PRESENT COMMUNITY

It may be of interest to present findings elicited by this question: "How long have you lived in your present community?" According to Table 5.9, nearly two-thirds of the sample have lived in their present community 10 years or more. About one-fifth have been living in the community less than four years.

FIGURE V-8

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SIZE OF COMMUNITY WHERE RESPONDENT SPENT MOST OF HIS LIFE, BY SERVICE AREA

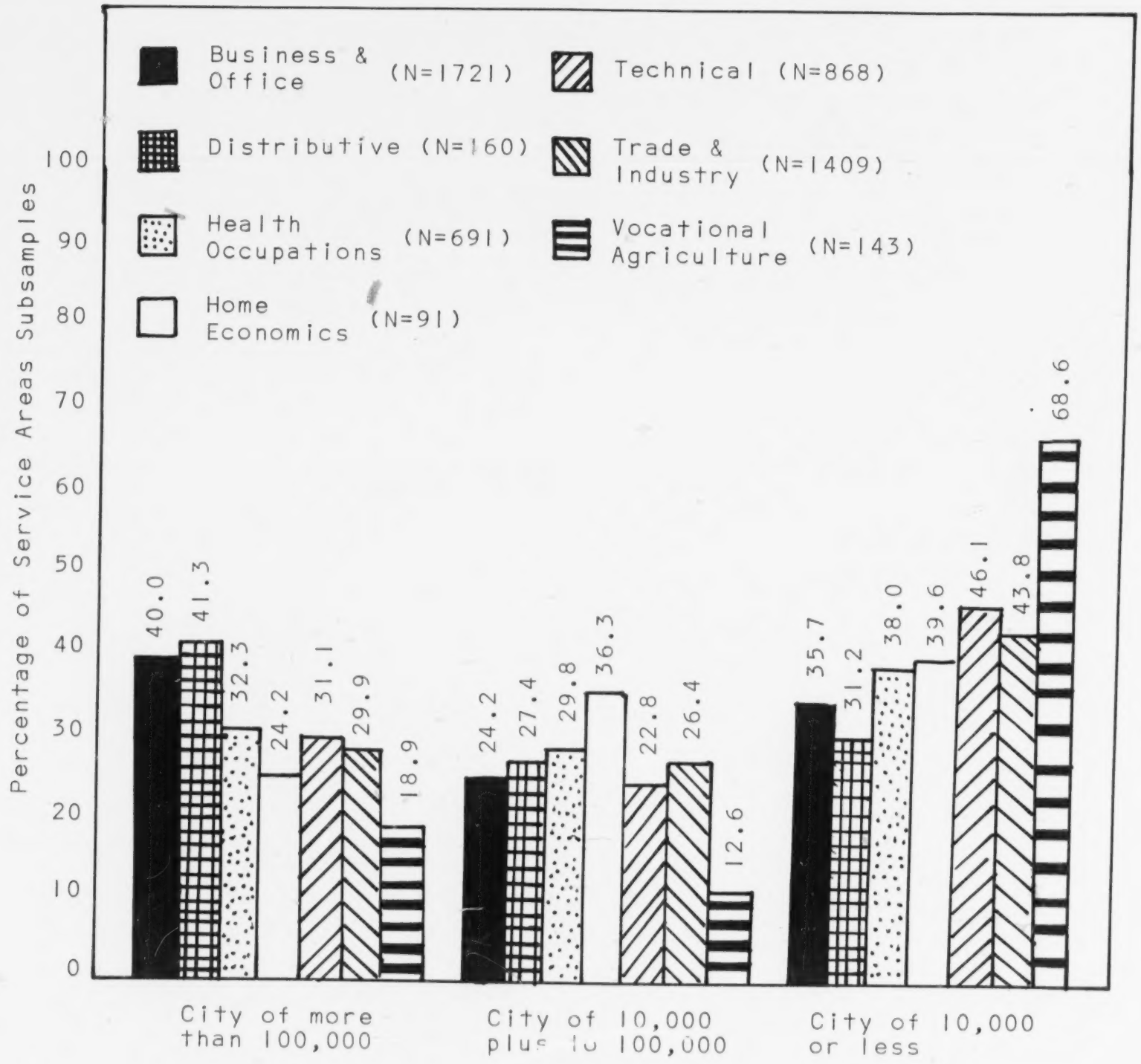


TABLE 5.9

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY LENGTH OF RESIDENCE IN PRESENT COMMUNITY

Length of Residence	Number	Percent
Less than 1 year	412	8.0
At least 1 year but less than 4	580	11.3
At least 4 years but less than 10	899	17.5
At least 10 years but less than 20	2403	46.8
Over 20 years	839	16.3
TOTAL	(5133)	99.9

FUTURE COMMUNITY ORIENTATION

Junior colleges must consider whether to offer courses intended to facilitate the development of occupational skills which essentially correspond with the primary labor needs of the immediate community or to meet the expected labor market requirements of a much broader area. Planning in this regard may be carried on more intelligently if data concerning the future community orientations of students are available.

The questionnaire contains one item bearing on this matter. Given the choices of "yes," "no," and "not sure," the subjects were asked: "Do you intend to remain in this community?" Before the results to this question are presented, it should be stressed that the validity of the question can be challenged. It is realized that a substantial majority of the students who expressed a desire to change geographical location are not likely to initiate such action independent of considerations relating to occupational opportunities. However, this does not mean that the nature of the training programs offered should not in part consider the geographical mobility intentions of potential graduates of these programs.

Examination of the responses provided by the total sample indicates the students are almost equally distributed among the three response alternatives (see Figure V-9). This same statement fairly accurately describes the response patterns of the male and female respondents; however, a slightly greater proportion of women do reveal they plan to remain in their present communities.

Table 5.10 presents the distribution of the students according to community orientation, controlling for vocational-technical service area. With the exception of the results obtained from the students enrolled in health occupations and technical education, a pattern of basic similarity typifies the intentions of the sample members in the five other service areas. Comparatively speaking, there is a tendency for a greater proportion of the health occupations and technical education students to express plans of staying and leaving their present communities, respectively.

In general, one basic inference appears warranted from the above data. As a group the vocational-technical students have been somewhat geographically mobile in the past and are likely to be considerably more mobile in the future, if specified intentions as well as broader social trends are accurate indicators. This means the occupational training programs offered by junior colleges should not be overly provincial and restricted to local community needs. If this is too often the situation, it is likely that many youth are being trained to be unemployable.

SUMMARY

A great deal of data have been presented on the socioeconomic background of the occupational students who participated in this study. The findings as they pertain to specific indicators of socioeconomic status (e.g., occupation of the head of household, head of household's income, and parental education) and to a general indication of relative position in the social class structure reveal consistently that many of the students have family origins of less than middle class standing. This is particularly true of the black respondents, and to a lesser extent the oriental subjects. Notwithstanding, it appears that respondents whose parental families belong to the lower skill levels of the white and blue collar groupings are somewhat underrepresented in the sample. In general, however, the data support the often repeated contention that junior colleges are having a democratizing effect, making it possible for many persons to attend college who otherwise would not have pursued higher education.

Family background was explored further by reporting data on the perceived importance which the students feel their parents

FIGURE V-9

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO THEIR INTENTION TO REMAIN IN THE PRESENT COMMUNITY, BY TOTAL SAMPLE AND SEX

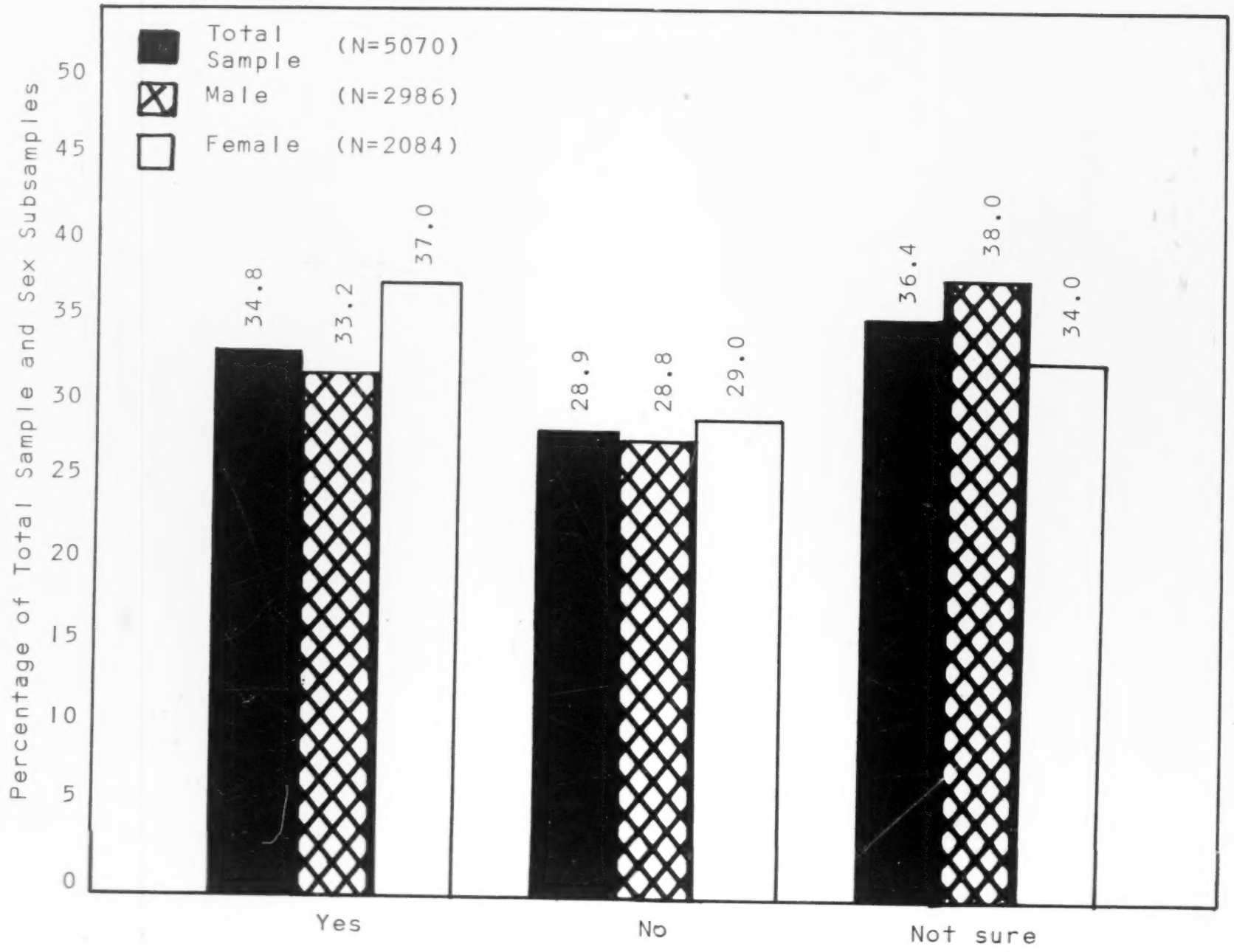


TABLE 5.10

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS
CLASSIFIED ACCORDING TO FUTURE COMMUNITY ORIENTATION, BY SERVICE AREA

"Do you intend to remain in this community?"	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Yes	36.2	35.6	40.1	36.3	29.9	33.1	32.4
No	27.5	30.0	26.5	35.2	33.0	29.0	28.2
Not sure	36.3	34.4	33.4	28.6	37.1	37.9	39.4
TOTAL (Number)	100.0 (1718)	100.0 (160)	100.0 (691)	100.1 (91)	100.0 (857)	100.0 (1404)	100.0 (142)

ascribe to the respondent's studying hard, receiving good grades in school, and finding the work he wants. According to the students, about two-thirds to three-fourths of their parents view each of these areas as "very important" or "quite important." Interestingly, the blacks and orientals, and especially the former, report proportionately more of their parents attribute greater importance to each of the parental interest areas. Position in the class structure was directly related to the relative amount of perceived importance. In the final analysis, it can be concluded that a vast majority of the students perceived attitudes which should support and help maximize their chances for successful academic and work careers.

A surprisingly greater number of students reported they had spent most of their lives in places approaching the lesser populated categories than was expected. Although two-thirds of the respondents have lived in their present communities for 10 years or more, about one-third of them said they intended to move, while approximately another one-third were "not sure" as to their future community orientations. If possible, the nature of the occupational programs offered by junior colleges must consider the expected migratory movements of their graduates.

VI. OCCUPATIONAL-EDUCATIONAL CAREER DEVELOPMENT: FROM HIGH SCHOOL TO JUNIOR COLLEGE

In general, this chapter concentrates on a variety of subjects bearing on occupational-career development. The focal point of analysis is the transition of individuals from high school to junior college occupational programs.

The chapter begins with a discussion of the initial post-high school experiences of the national sample of students. Parental attitudes regarding college attendance constitute the next major topic. This is followed with considerations of various factors influencing college and program selections. The major goals for pursuing a higher education represent another problem explored in the chapter. A brief summation of findings is presented at the end.

INITIAL POST-HIGH SCHOOL EXPERIENCE

As will be discussed later in this chapter, a large proportion of the sample had not formulated career plans prior to high school graduation. Consequently, it is deemed important to determine the initial post-high experiences of the respondents, especially those which may have consequences for educational-occupational career decisions. The scope of this section is limited to the activities pursued following high school and length of full-time employment between high school and college.

POST-HIGH SCHOOL ACTIVITY

A paucity of data exist on the period between high school and college. In particular, there is a noticeable absence of information on the principal activity of future college students who do not begin their higher education during the first academic year following high school. A study by Baird, Richards, and Shevel (1969), based primarily on graduates of junior college transfer programs, did report data in response to the following question: "What were you doing just before you first entered your present college?" A majority of the students (69.2 percent) said they were attending high school; a sizeable proportion (16.3 percent) were working on a full- or part-time job. In addition, almost seven percent were attending another post-secondary

institution. In the present research, a similar question was asked the community college occupational students.[1] The results are presented in Table 6.1.

TABLE 6.1

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY INITIAL ACTIVITY FOLLOWING HIGH SCHOOL

"After you left high school, what did you do?"	Number	Percent
Come directly to this college	2,750	53.9
Attended another school first	608	11.9
Worked before entering college	1,007	19.7
Was in military service	428	8.4
Stayed at home, not working	93	1.8
Other	217	4.3
TOTAL	(5103)	100.0

Almost two-thirds of the occupational students either "came directly to this college" (53.9 percent) or "attended another school first" (11.9 percent). Close to one-fourth maintained they had worked before entering junior college.

Comparison of the findings of the two studies reveal certain relevant differences. Whereas 69.2 percent of the "mostly transfer student sample" were attending high school prior to junior college enrollment, 53.9 percent of the "occupational student sample" gave a comparable response. Proportionately more of the

[1] Although the wording of the two questions varies, they seem to have elicited data relative to the same behavioral phenomena. It should also be noted that the two samples of students were not likely to have considered any work experience during the summer, following high school graduation and prior to entering college in the fall, as an activity justifying selection of the "worked before entering college" response.

students in the present study's sample were in military service (8.4 percent to 2.5 percent), had worked before college (19.7 percent to 16.3 percent), or had attended another post-secondary institution (11.9 percent to 6.9 percent).

Figure VI-1 facilitates a comparison between sex subsamples as to the activity pursued by the respondents in the present study following high school graduation. Two major differences are evident: (1) a greater proportion of the women "came directly to this college" and (2) practically all the respondents who went to the military are men.

Although tabular data on age are not presented in this chapter, it warrants mentioning that almost all the males who went to military service fell into the upper age categories (63.8 percent in the 24 years and over category) and the "stayed at home, not working" category is composed almost exclusively of women in the youngest or oldest age groupings. The "other" column in Figure VI-1 mainly represents (71.6 percent, N = 204) older females (24 years and over).

When socioeconomic status is viewed as a classifying variable, a number of significant findings become apparent. As shown in Figure VI-2, there is a pronounced tendency for students from lower socioeconomic families to have worked prior to entering college. Furthermore, supporting other sources (Coates and Pellegrin, 1965), a greater proportion of the respondents from the lower socioeconomic groups have previous military service. In the "worked before entering college" category, almost twice as many lower status students, than higher status respondents, had been employed after high school.

The inescapable conclusion suggested by these data is that high socioeconomic level students, on the whole, go directly to college. The availability of parental financial assistance is partially responsible for this. Further, as will be discussed subsequently in this chapter, some evidence indicates that high socioeconomic status respondents tend to receive greater support from their parents relative to the value of higher education.

The inverted "U" function describes the distribution of the students in the "came directly to this school" category, across socioeconomic status levels. This can be understood on the basis of what has already been said. Comparatively speaking, fewer lower status occupational students go directly to college because they frequently secure jobs or become members of the armed forces. Fewer higher status respondents are in this category because they often enroll at another college before transferring to a junior college. It is conjectured that junior colleges often represent a "second chance" for students from the higher status families, in particular, after they have failed to meet the academic standards of a four-year college or university.

FIGURE VI-1

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO INITIAL ACTIVITY FOLLOWING HIGH SCHOOL, BY SEX

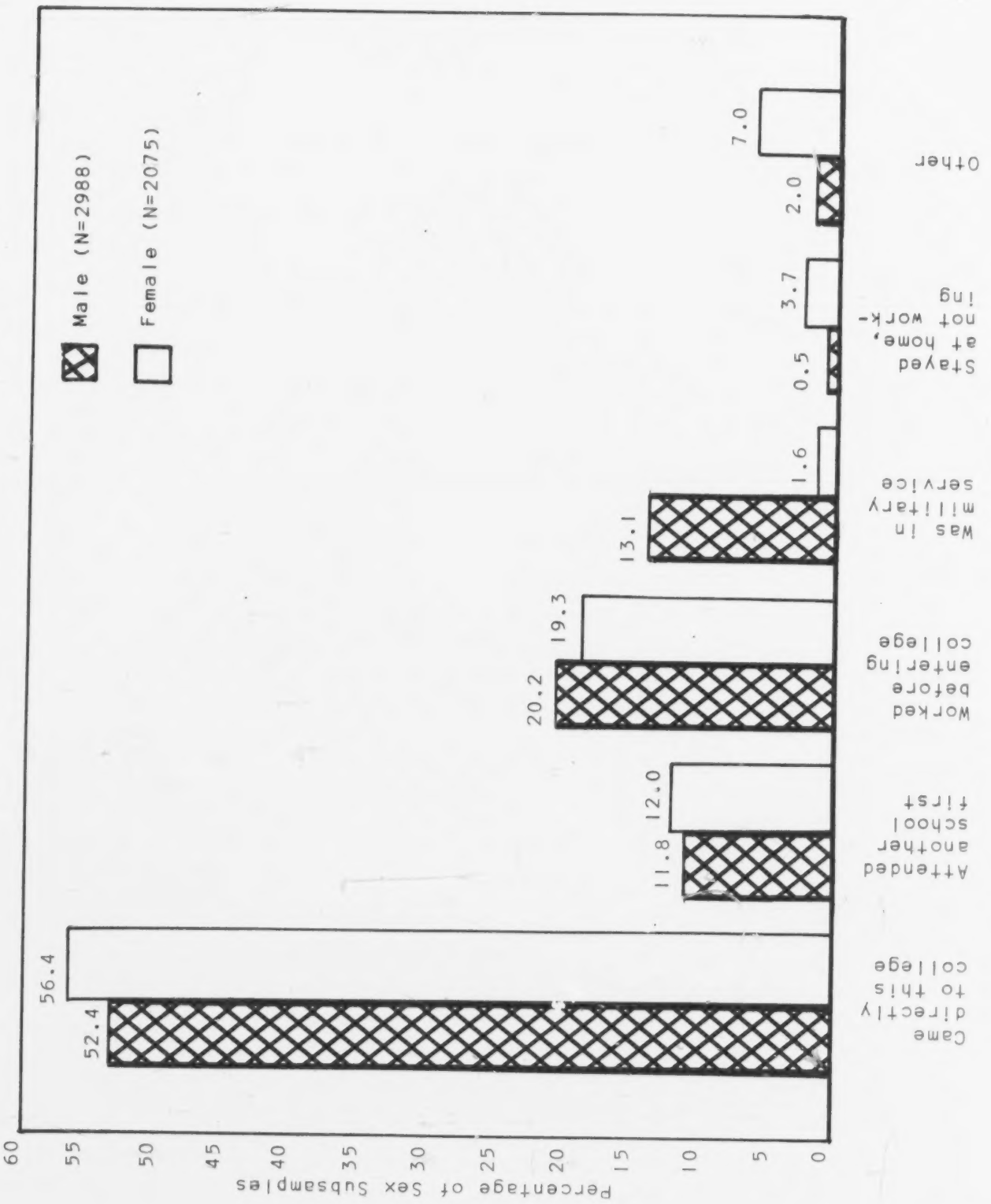
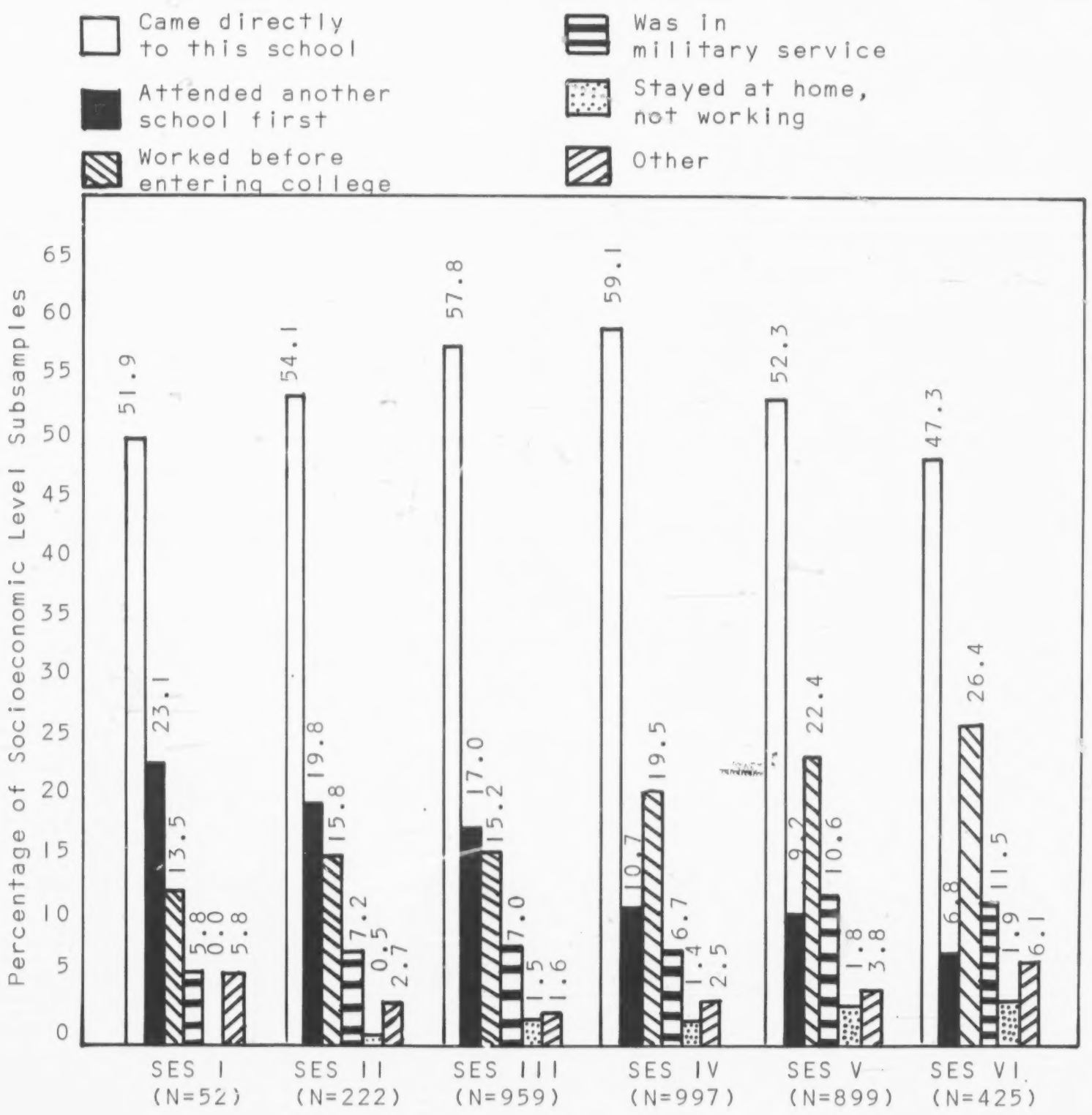


FIGURE VI-2

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO INITIAL ACTIVITY FOLLOWING HIGH SCHOOL, BY SOCIOECONOMIC LEVEL



LENGTH OF FULL-TIME EMPLOYMENT

Additional information on the period between high school and college was sought by ascertaining the length of full-time employment experience from those subjects having such experience. The frequency and percentage distributions are presented in Table 6.2. Of the 4,939 respondents on whom data exist, about one out of five interrupted their formal education by being employed at least one year on a full-time status.

TABLE 6.2

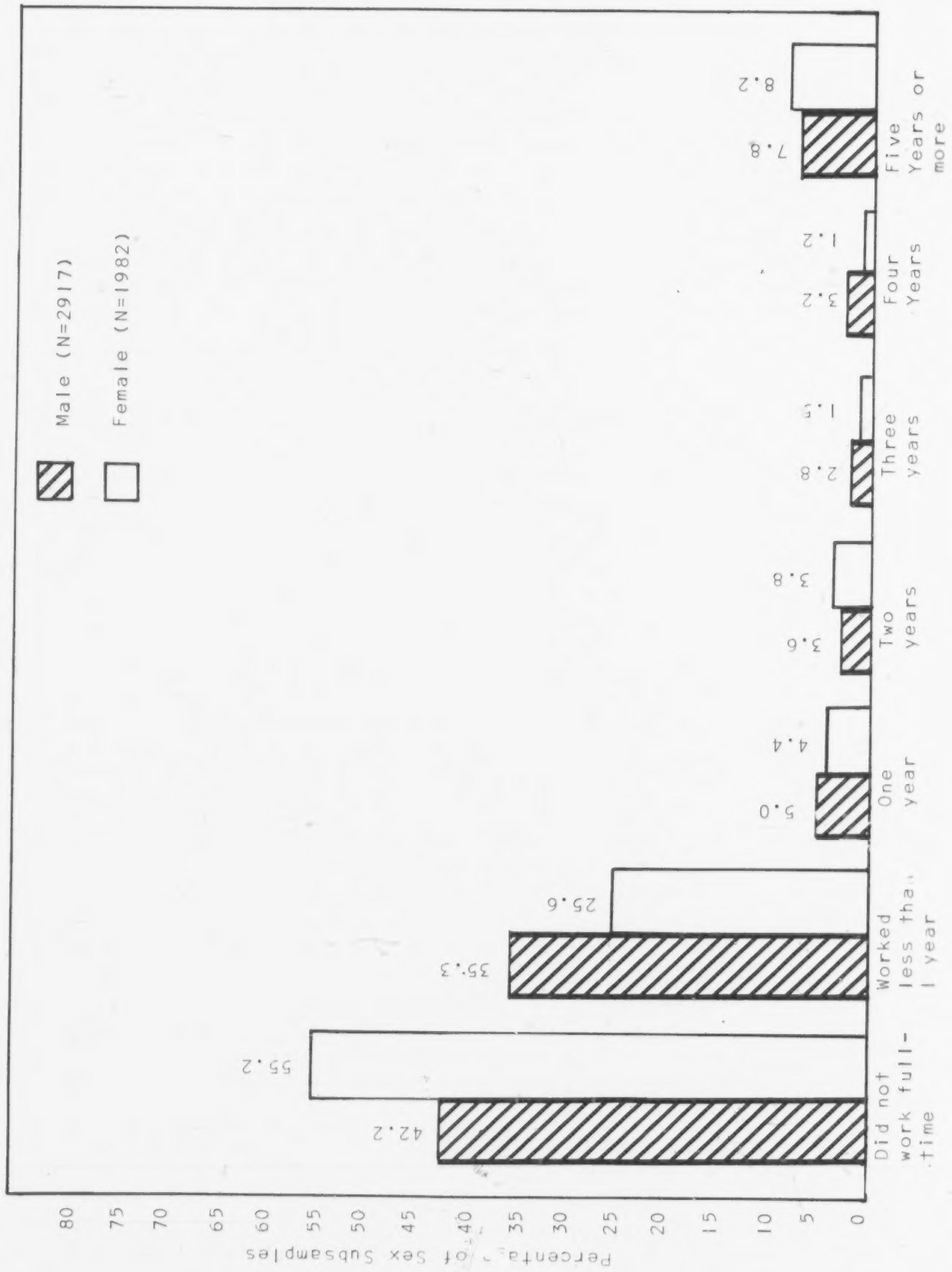
DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY LENGTH OF FULL-TIME EMPLOYMENT BETWEEN HIGH SCHOOL AND JUNIOR COLLEGE

"If you worked full-time before entering college, how many years did you work?"	Number	Percent
Did not work full-time	2349	47.6
Worked less than 1 year	1546	31.3
One year	234	4.7
Two years	183	3.7
Three years	114	2.3
Four years	118	2.4
Five years or more	395	8.0
TOTAL	(4939)	100.0

Certain differences are evident when comparisons are made according to sex (see Figure VI-3). This is especially the case with reference to the "did not work full-time" and "worked less than one-year" categories. Women are proportionately more numerous in the former and men in the latter. A possible explanation for this finding is that rewards in the present job structure are such that females realize sooner than males the advantage of additional training.

FIGURE VI-3

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO LENGTH OF FULL-TIME EMPLOYMENT BETWEEN HIGH SCHOOL AND COLLEGE, BY SEX



When one looks at the number of years worked by socioeconomic level, the expected findings are evident. Figure VI-4 shows the distribution across socioeconomic levels for those students who worked five or more years and those who were not employed on a full-time basis. Lower socioeconomic students are overwhelmingly more likely to have worked five years or more; students at the other socioeconomic extreme are more likely to have had no full-time work experience. As will be shown later in this chapter, work experience appears to be a major influencing factor for those students who held full-time jobs. Consequently, if lower status students, in general, tend to have work experience between high school and college, one must conclude that non-educational experiential factors have greater implications for the careers of lower status students than they do for higher status respondents.

PARENTAL ATTITUDE AND COLLEGE ATTENDANCE

Along with ability and socioeconomic status (Eckland, 1965; Sewel and Shah, 1969), parental attitude in the form of encouragement-discouragement (Shore and Leiman, 1965) with reference to college attendance has frequently been cited as a crucial variable. Two items elicited the student's perception of his father's and mother's feelings regarding his attending college. The findings are presented by total sample, sex, race, and socioeconomic level. One comparison is made with a previous study.

Figure VI-5 indicates at least two-thirds of the respondents viewed both parents as taking it for granted they would go to college or as actively urging them to go to college. Significantly, more mothers are perceived as having urged their children to go to college, than is the case for fathers. About one-fifth of the occupational students feel their parents left it up to them whether or not they attended college.

As revealed in Figure VI-6, certain differences exist when the respondents are classified according to sex. For example, the number of respondents who specify their parents "actively urged me to go to college" ranges from 38.1 percent of the women with reference to their fathers, to 59.7 percent of the men with reference to their mothers.

Are there any major variations between black and white students on their views of the extent of parental encouragement regarding college education? As highlighted in Figure VI-7, one observation is quite apparent. Regardless of race, mothers are perceived more often than fathers to actively urge their children to attend college. This is especially the case for the black respondents. Undoubtedly, some of this variation is due to the absence of many of the black fathers from their families.

FIGURE VI-4

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO TWO DIFFERENT WORK PERIODS, BY SOCIOECONOMIC LEVEL

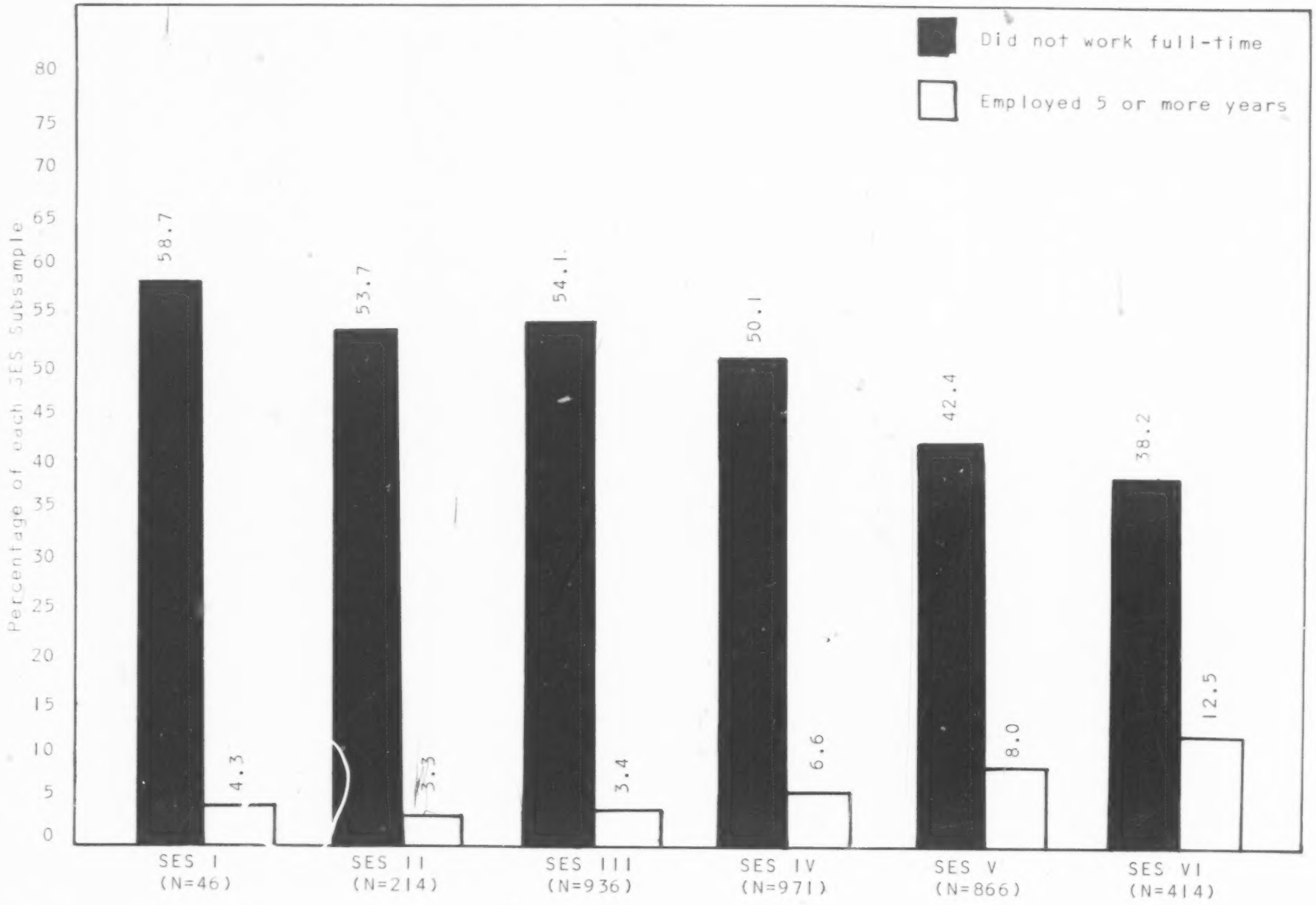


FIGURE VI-5

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO RESPONDENT'S PERCEPTION OF HIS FATHER AND MOTHER'S FEELINGS REGARDING HIS ATTENDING COLLEGE, BY TOTAL SAMPLE

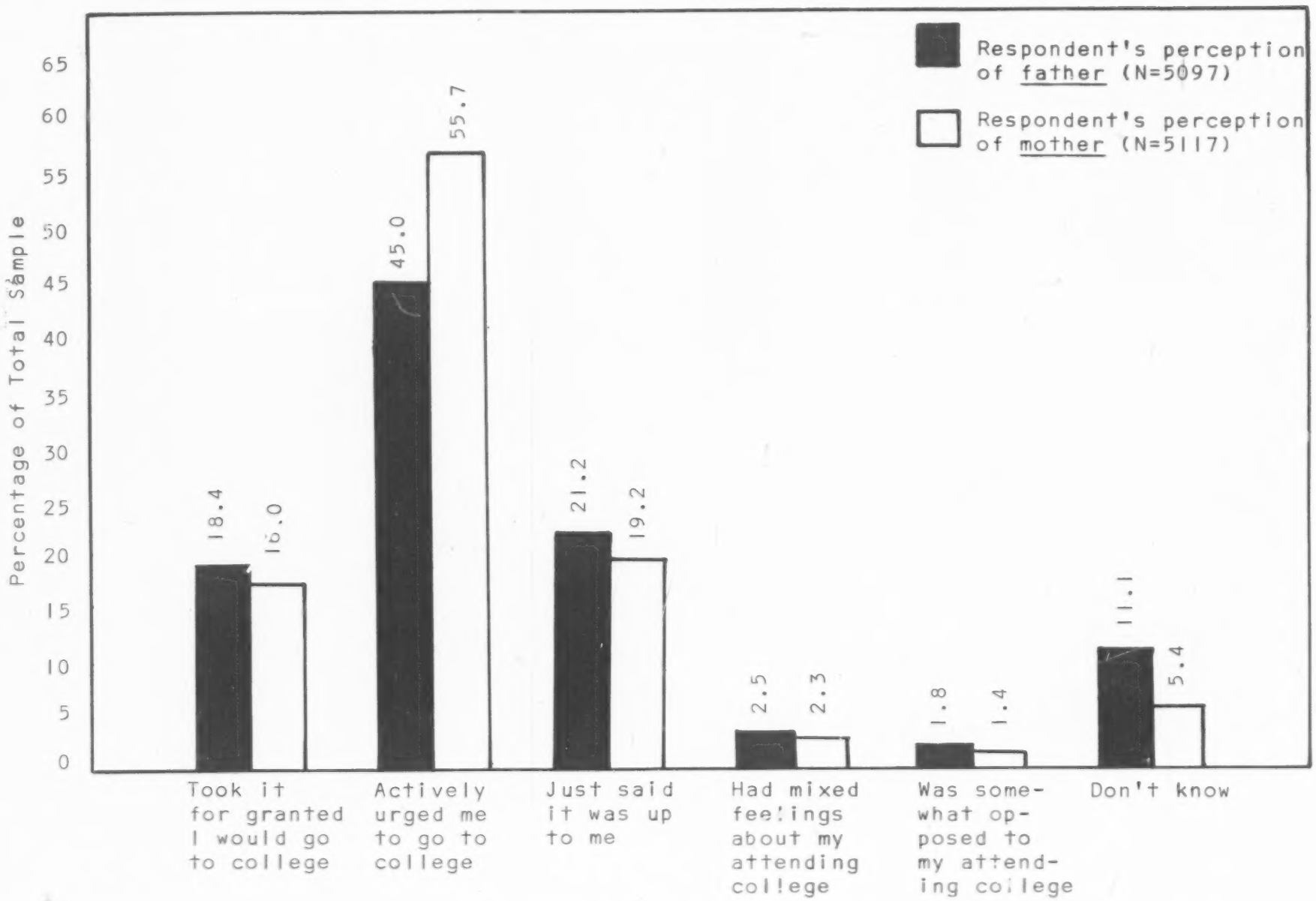


FIGURE VI-6

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO RESPONDENT'S PERCEPTION OF HIS FATHER AND MOTHER'S FEELINGS REGARDING HIS ATTENDING COLLEGE, BY SEX

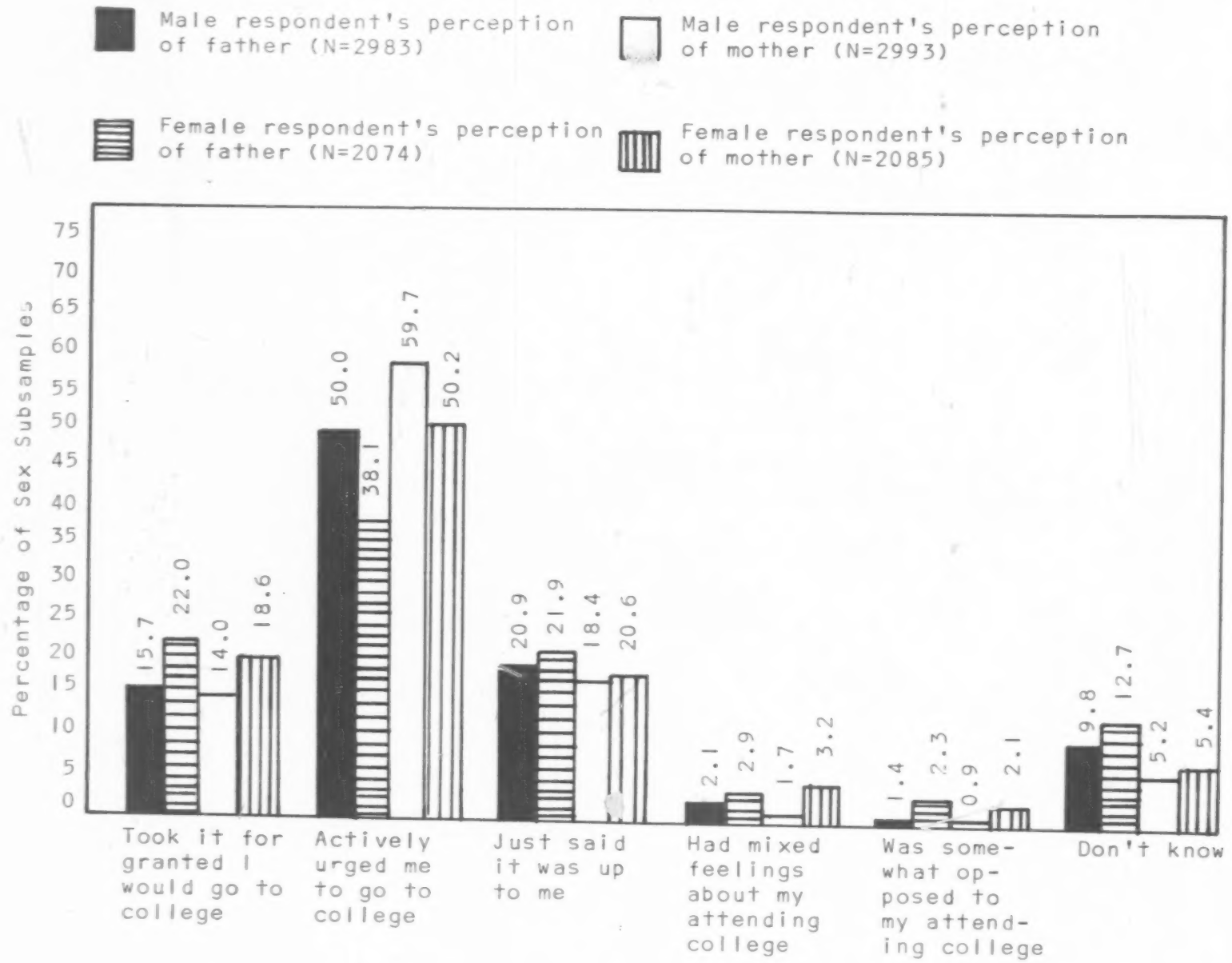
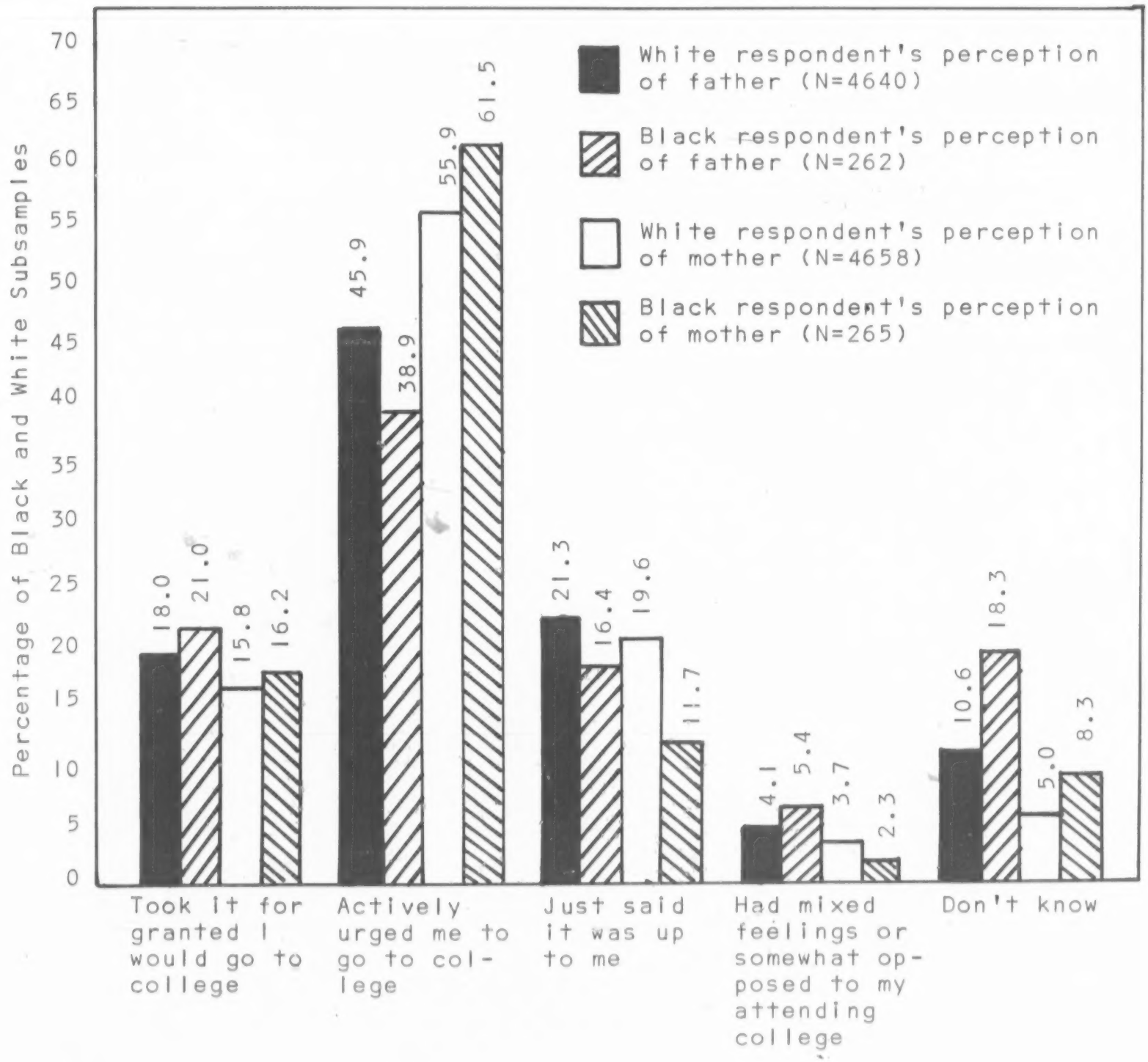


FIGURE VI-7

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO RESPONDENT'S PERCEPTION OF HIS FATHER AND MOTHER'S FEELINGS REGARDING HIS ATTENDING COLLEGE, BY RACE



Tables 6.3 and 6.4 have been prepared to demonstrate the association between parental encouragement and socioeconomic level. Regardless of parent, there is a direct relationship between socioeconomic level and the proportion of respondents who maintain their fathers and mothers take it for granted they would attend college. In the case of each parent, fairly comparable patterns characterize the distribution of responses in the "actively urged me to go to college" category, with socioeconomic levels III and IV containing the highest percentages. These findings, not unexpectedly, reflect the influence of socioeconomic background on parental attitudes regarding college attendance.

This section closes with a comparison of the results from the present research on the respondent's perceptions of his father's interest in his attending college with unpublished SCOPE data (cited in Cross, 1968). Table 6.5 summarizes this comparison.

Since these two studies do not have the same response categories in all instances, conclusions should be made with caution. However, two observations seem unchallengeable. Four-year college students received the most encouragement and the noncollege students received the least. Junior college students are in the middle with the SCOPE respondents (transfer and occupational students) claiming their fathers encouraged them to pursue a higher education to a much greater extent than did the occupational students who participated in the present study. In addition, the four student populations reflect the same rank order in terms of whether their parents were likely to express an interest in college attendance for their children.

JUNIOR COLLEGE SELECTION

This analysis of factors impinging upon the junior college selection process examines three interrelated areas. Initially, a general examination is made of the most important factors affecting this process. This is followed by more limited and specific discussions of findings pertaining to parental influence and the proximity of schools.

REASONS FOR ATTENDING PARTICULAR COLLEGE

From 10 alternatives, the community-junior college occupationally-oriented students were asked to identify the most important, second most important, and third most important reasons why he was attending the junior college where presently enrolled. The responses to the three questions were combined to yield one mean distribution pattern. This was accomplished by assigning a weight of three to each most important reason, two to each second

TABLE 6.3

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SOCIOECONOMIC LEVEL, BY EXTENT OF FATHER'S ENCOURAGEMENT REGARDING HIS ATTENDING COLLEGE

"How did your father feel about your attending college?"	Socioeconomic Level					
	I	II	III	IV	V	VI
Took it for granted I would go to college	38.5	30.5	24.3	15.4	15.1	10.8
Actively urged me to go to college	46.2	47.1	49.0	49.3	43.0	42.0
Just said it was up to me	15.4	17.5	18.0	23.2	23.3	26.3
Had mixed feelings about my attending college	0.0	1.8	2.1	3.0	3.0	3.5
Was somewhat opposed to my attending college	0.0	0.4	1.1	1.8	2.5	2.6
Don't know	0.0	2.7	5.5	7.2	13.2	14.8
TOTAL (Number)	100.1 (52)	100.0 (223)	100.0 (963)	99.9 (997)	100.1 (897)	100.0 (426)

TABLE 6.4

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SOCIOECONOMIC LEVEL, BY EXTENT OF MOTHER'S ENCOURAGEMENT REGARDING HIS ATTENDING COLLEGE

"How did your mother feel about your attending college?"	Socioeconomic Level					
	I	II	III	IV	V	VI
Took it for granted I would go to college	34.6	29.9	20.7	13.6	13.0	10.3
Actively urged me to go to college	40.4	49.6	56.2	58.7	58.4	55.0
Just said it was up to me	21.2	16.5	17.2	20.7	18.5	22.5
Had mixed feelings about my attending college	0.0	0.4	1.9	2.6	3.0	2.1
Was somewhat opposed to my attending college	1.9	0.9	0.7	1.4	1.3	2.8
Don't know	1.9	2.7	3.2	2.9	5.8	7.3
TOTAL (Number)	100.0 (52)	100.0 (224)	99.9 (964)	99.9 (998)	100.0 (902)	100.0 (427)

TABLE 6.5

PERCENTAGE COMPARISON BETWEEN EXTENT OF FATHERS' ENCOURAGEMENT FOR THEIR SONS CONTINUING THEIR EDUCATION BEYOND HIGH SCHOOL AS PERCEIVED BY JUNIOR COLLEGE OCCUPATIONAL STUDENTS WITH THOSE OF STUDENT GROUPS IN THE SCOPE STUDY

Extent of Father's Encouragement Response Category		SCOPE Study*			
SCOPE Study	Present Study	Non-College Students	Junior College Students	4-Year College Students	Present Study
Wants me to go for sure	Actively urged me to go to college	26	55	66	45.0
Encourages but does not insist	- - - -	27	26	20	--
- - - -	Took it for granted I would go to college	--	--	--	18.4
Would like it, but thinks we can't afford it	- - - -	5	1	1	--
Leaves it up to me	Just said it was up to me	27	11	8	21.2
Doesn't want it, but doesn't say no	- - - -	2	1	1	--
- - - -	Has mixed feelings about my attending college	--	--	--	2.5
Won't let me go	Was somewhat opposed to my attending college	1	0	0	1.8
Don't know	Don't know	13	5	4	11.1
No response	- - - -	7	4	2	--
TOTAL		108	103	102	100.0

*In this research the high school senior was asked how interested his father was in seeing him continue his education in "some sort of college or special school" after high school (cited in Cross, 1968: 17-18).

**The figures reported from the SCOPE Study were copied from Table 4 of Cross (1968). Apparently, some miscalculations or errors in transposing characterize these percentages.

most important reason, and a one to each third most important reason. Subsequently, a mean score was computed for each of the 10 factors. According to Figure VI-8, three reasons--"close to home," "low cost," and "special programs or courses offered" account for slightly more than two-thirds of the mean percentage score. The comparatively high rankings received by "close to home" and "low cost" are not surprising. They could have been predicted, given the socioeconomic background and limited monetary resources of many of the sample members. The fact that "special programs or courses offered" leads the group of 10 factors underscores the importance of making junior college program offerings compatible with student needs and those of the labor market. The insignificant role played by the high school counselor and vocational education teacher in influencing students to attend specific colleges is readily apparent from these findings.

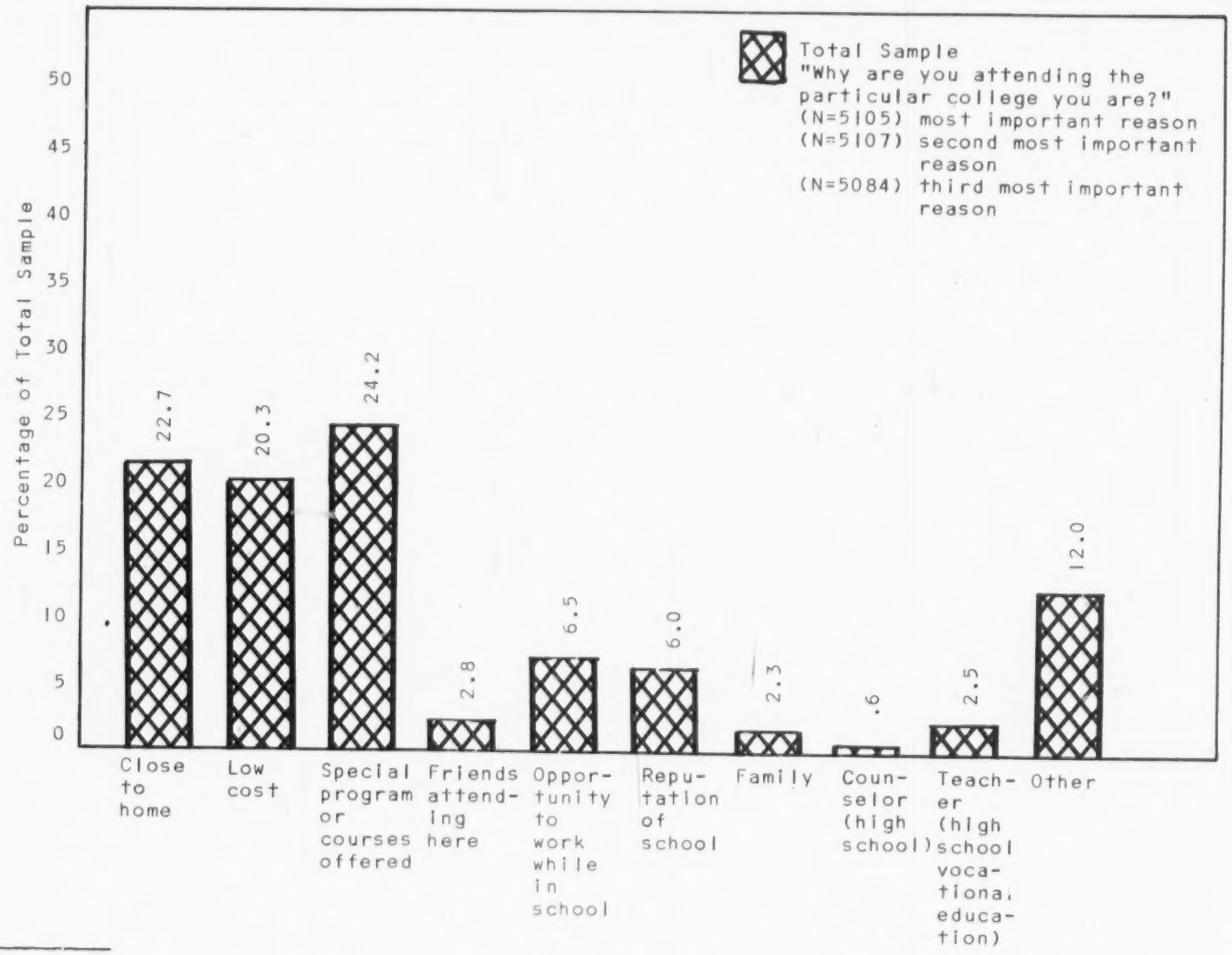
Figure VI-9 depicts the response patterns reflecting the students' most important reason for attending their present college, according to total sample and sex. Apparently, community college vocational students place little emphasis on "reputation of school" as an important factor affecting school selection. This is in contrast to the relative importance given "reputation" by more than 8,500 high school seniors in 11 southern states (cited in *College and University Business*, April, 1966: 106). Scholastic reputation was considered second only to "specific field of study" (26.5 percent), being selected by 23.7 percent of the high school sample. The "cost" factor was considered most important in college selection by 22.1 percent of the seniors.

Returning to Figure VI-9, comparisons by sex indicate certain differences worthy of noting. Whereas a greater percentage of the males specify that "opportunity to work" and "low cost" represent most important reasons for attending their present junior colleges, greater percentages of females select "close to home" and "special programs or courses."

Are the factors cited by the respondents fairly uniformly distributed throughout the population, regardless of service area represented by the respondent? In general, Table 6.6 indicates the above question must be answered negatively. In three of the areas (health, home economics, and agriculture), the percentages of students claiming either "close to home" or "low cost" as the most important reasons for attending a particular college are significantly less in comparison to the other service areas, whereas, importantly, greater proportions of these respondents chose "special program or courses offered." This may be explained by the fact that post-secondary programs in health occupations, home economics, and vocational agriculture are not as widely spread among institutions as the other vocational-technical areas.

FIGURE VI-8

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO REASON* FOR ATTENDING PRESENT COLLEGE, BY TOTAL SAMPLE



*Percentages represent mean scores resulting from ascribing a weight of 3 to most important reason, 2 to second most important, and 1 to third most important.

FIGURE VI-9

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO MOST IMPORTANT REASON FOR ATTENDING PRESENT COLLEGE, BY TOTAL SAMPLE AND SEX

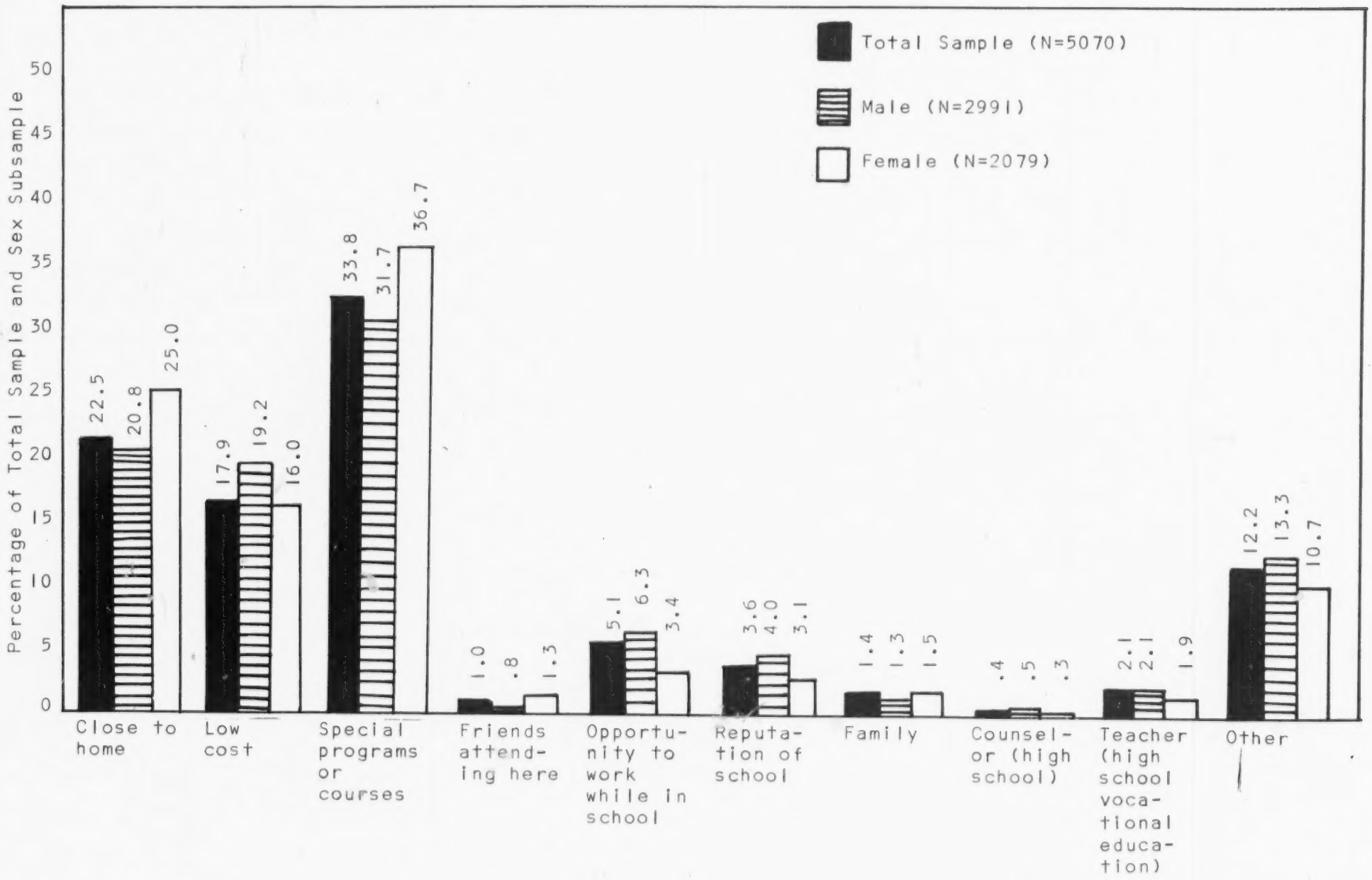


TABLE 6.6

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY MOST IMPORTANT REASON FOR ATTENDING PRESENT COLLEGE

"Why are you attending the particular college you are? Select the most important reason."	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Close to home	27.0	23.9	15.7	9.8	19.4	23.8	12.1
Low cost	23.7	22.0	8.0	9.8	16.2	18.1	5.0
Special program or courses offered	17.8	21.4	59.1	65.2	39.7	33.9	59.6
Friends attending here	1.2	1.3	0.4	2.2	0.7	1.3	1.4
Opportunity to work while in school	6.8	7.5	1.3	0.0	3.0	6.3	2.8
Reputation of school	3.1	4.4	3.3	3.3	6.1	3.0	2.8
Family	1.6	1.9	1.5	0.0	0.9	1.5	0.7

Continued

TABLE 6.6 cont'd.

High school vocational education teacher	0.2	0.0	0.0	1.1	0.7	0.6	1.4
High school guidance counselor	3.0	4.4	0.6	3.3	1.4	1.7	2.1
Other reason	15.6	13.2	10.0	5.4	11.9	9.8	12.1
TOTAL (Number)	100.0 (1720)	100.0 (159)	99.9 (687)	100.1 (92)	100.0 (865)	100.0 (1401)	100.0 (141)

The relevance of socioeconomic background as it pertains to the most important reason for attending a particular college is examined next. The greatest differences among socioeconomic groups appear in the distribution of the "close to home" category. It is chosen most often by members of the lowest socioeconomic level and least often by the highest. Although the differences are not as great, this same general pattern is typical of the "low cost" and "special program or courses offered" categories. These and other findings are reported in Table 6.7.

TABLE 6.7

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SOCIOECONOMIC LEVEL, BY MOST IMPORTANT REASON FOR ATTENDING PRESENT COLLEGE

Most Important Reason	Socioeconomic Level		
	I & II	III & IV	V & VI
Close to home	16.4	21.7	24.5
Low cost	17.1	18.6	19.1
Special program or courses offered	28.5	32.4	34.9
Friends attending here	.4	.9	1.3
Opportunity to work while in school	6.6	5.4	5.0
Reputation of school	5.5	4.3	2.9
Family	2.2	1.6	.8
High school vocational ed. teacher	.7	.5	.3
High school guidance teacher	1.5	2.0	2.0
Other reason	21.2	12.5	9.3
TOTAL (Number)	100.1 (274)	99.9 (1959)	100.1 (1324)

IMPORTANCE PARENTS ATTACH TO RESPONDENT ATTENDING PARTICULAR COLLEGE

On a comparative basis, as reported in the previous section, the family is considered a relatively unimportant influence upon specific college selection. In a study by Knoell and Medsker (1964), community-junior college students were asked to rate "parents wanted it" in terms of its importance to the student in making the decision to attend a junior college, as opposed to a four-year college. The response pattern is as follows: most important = eight percent; considerable importance = 14 percent; some importance = 18 percent; minor importance = 15 percent; little or no importance = 44 percent. The possible influence of parents, in a general sense, with reference to college selection was examined by asking this question: "How important is it to your parents that you go to this college?" The results by the sample as a whole and sex are pictured in Figure VI-10.

Roughly speaking, for every 20 individuals in the sample, nine indicate it is either "not very important" or "not important at all" to their parents that they attend their present colleges, six say it is either "very important" or "quite important," and five consider the wishes of their parents to be "fairly important" in the selection of their present colleges. Sex does not have any appreciable effect upon these distributions.

In conclusion, the importance which the respondent's parents is perceived as attributing to the respondent's attending his present junior college is not particularly great.

PROXIMITY OF COLLEGE

Previous research (Medsker and Trent, 1965) has stressed that the type of college available in the community made considerable difference whether academically able people from low socioeconomic background went to college, and very little difference to bright individuals with high socioeconomic statuses. It has already been indicated that closeness of junior college represents a major consideration to many of the occupational students which induce them to select the college as the institution in which to continue their education. In order to pursue this matter further, the respondents were asked the following question: "Which of the following best describes the one-way distance between your hometown and this college?" Figure VI-11 indicates that nearly one-half of the sample have hometowns 10 miles or less from the colleges they are attending.[2] At the other extreme, slightly more

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[2]Of this group, about seven out of 12 have hometowns located within five miles of the colleges in which they are enrolled.

FIGURE VI-10

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO IMPORTANCE THEIR PARENTS ATTRIBUTED TO THEIR ATTENDING THE COLLEGE WHERE THEY ARE ENROLLED, BY TOTAL SAMPLE AND SEX

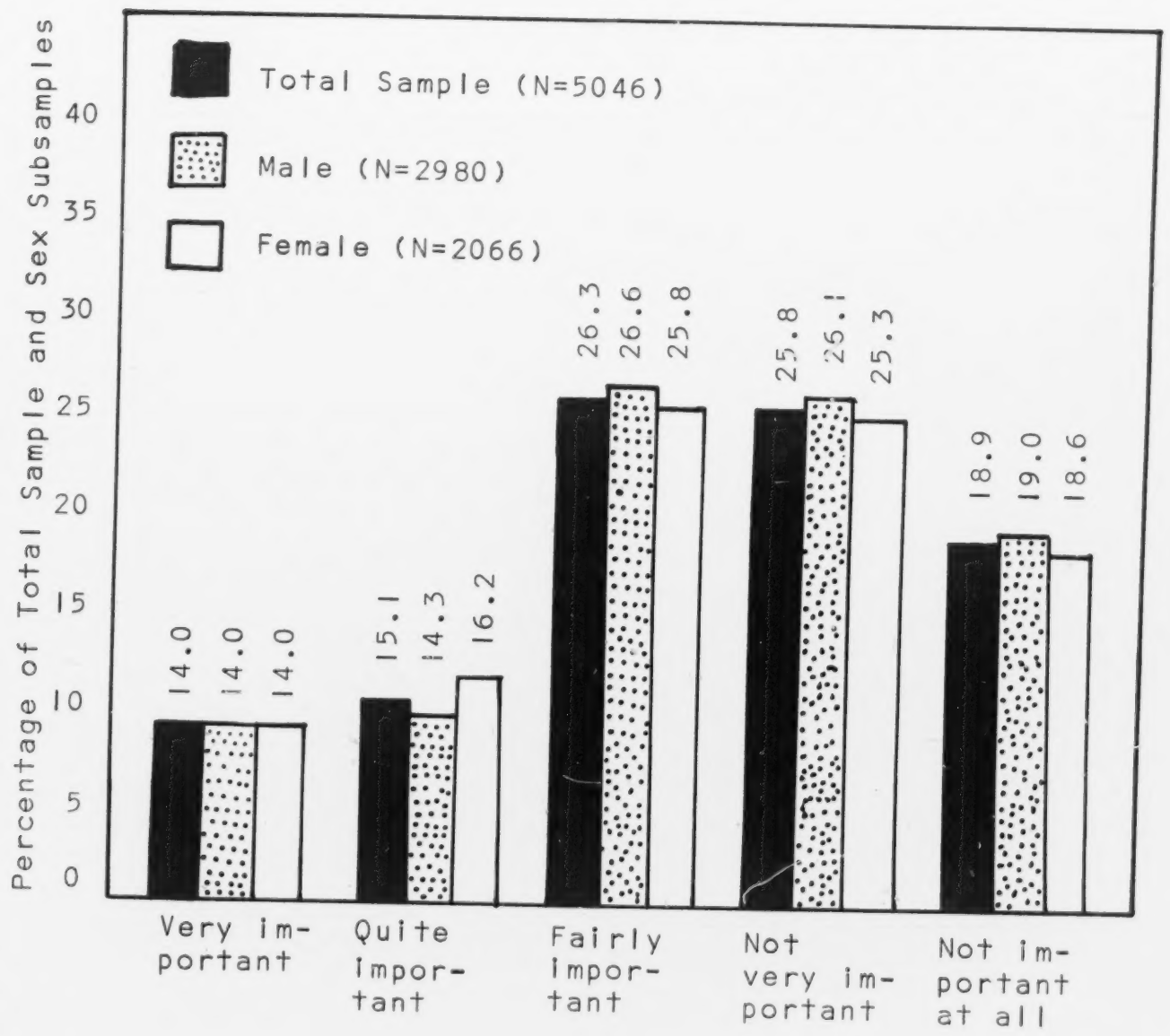
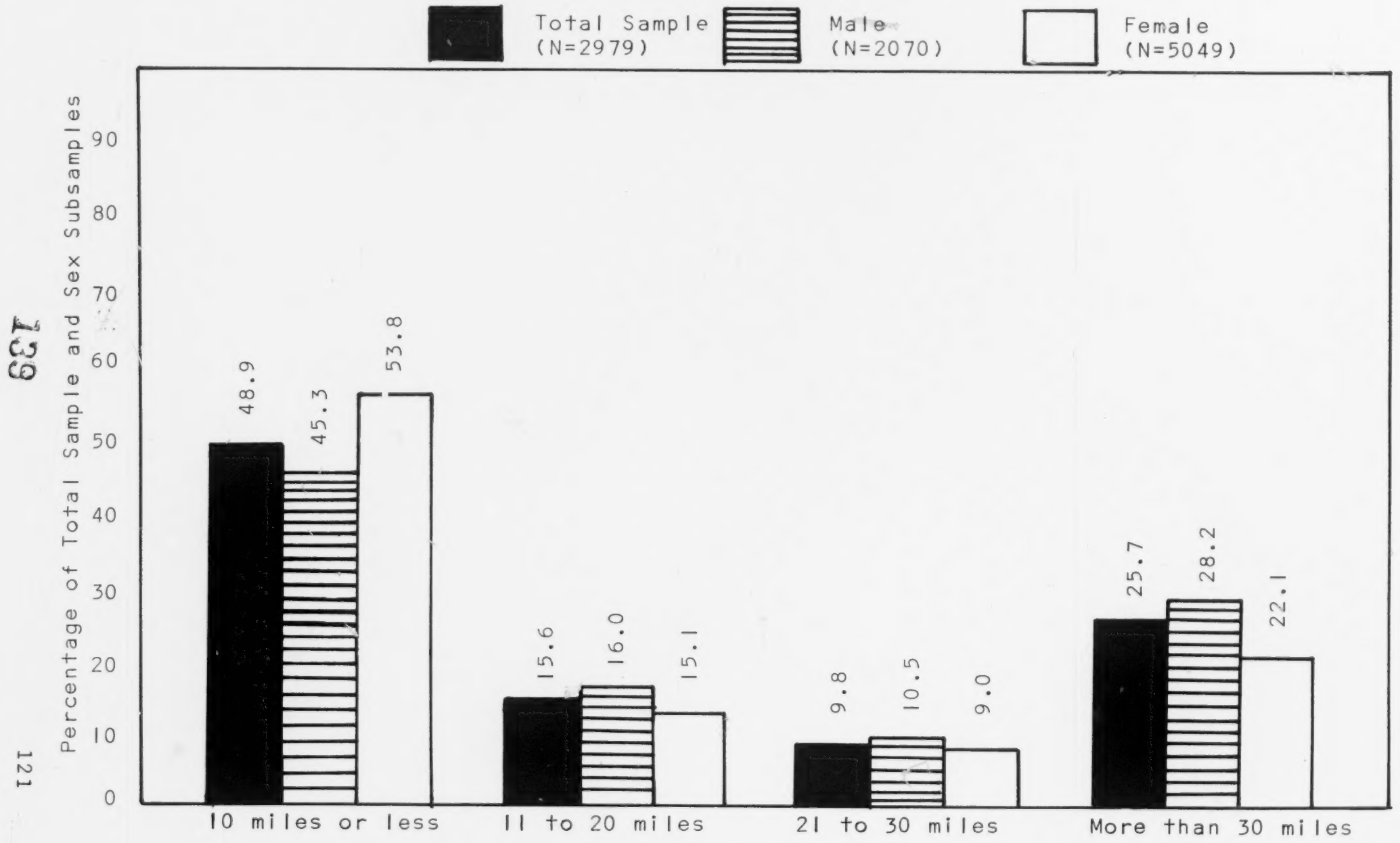


FIGURE VI-II

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO ONE-WAY DISTANCE BETWEEN HOMETOWN AND COLLEGE, BY TOTAL SAMPLE AND SEX



than one-fourth of the subjects' hometowns are 30 miles or more from their colleges. There is a tendency for the hometowns of the females to be closer to their colleges than those of the males.[3] We do not know the number of students who were actually commuting between their hometowns and colleges; however, undoubtedly the vast majority were commuters.[4]

Other unavailable information is required before one could accurately estimate the number of students in the sample who do not have convenient access to a post-secondary vocational education. It does appear, however, that convenient junior college accessibility is not characteristic of a substantial minority of the subjects.

Marital status seems to be related to the number of miles separating hometown and college (see Figure VI-12). In general, there is a tendency for the single, engaged, and married, but no children, to attend junior colleges further removed from their hometowns, than is the case for married persons, with children, or respondents who are formerly married. This finding is consistent with what could have been predicted. As a person's obligations, financial or otherwise, increase, there will be a greater tendency for the proximity of college to assume greater importance in college selection and attendance.

It was written earlier that the availability of study program is one of the leading factors considered in the college selection process. As such, it may be of interest to determine if the one-way, hometown to college distance is similar across service areas. As shown in Table 6.8, a significantly greater proportion of the vocational agriculture majors attend colleges located further from their hometowns. Since most of the vocational agriculture students live on farms, this finding comes as

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[3]This finding is in agreement with what was reported in a Washington State study (Metcalf, 1965). This study also reported that one-half of almost 31,000 students traveled less than five miles to school (one-way distance). On the other hand, 15.2 percent of the sample traveled 20 miles or more.

[4]For the 60 schools which contributed students to the sample, the living arrangements as designated by Gleazer (1967a) are as follows:

(1) Totally off-campus = 41
(2) Mostly off-campus = 1
(3) Under 21 years of age, on-campus = 1
(4) Women on campus, if not with parents = 1
(5) Some (limited) on-campus = 6
(6) Mostly on-campus = 1
(7) On-campus, if not with parents = 9

FIGURE VI-12

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO ONE-WAY DISTANCE BETWEEN HOMETOWN AND COLLEGE, BY MARITAL STATUS

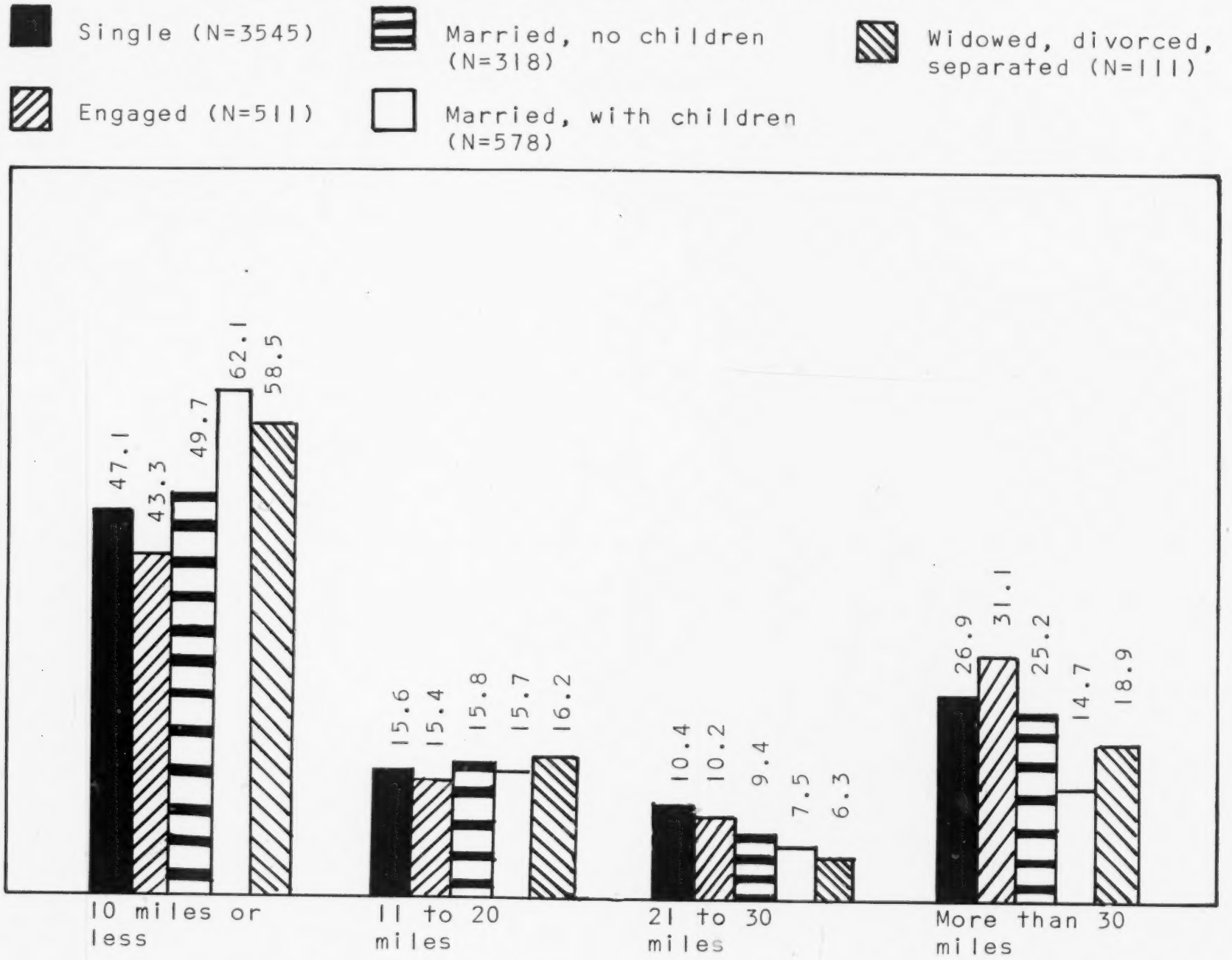


TABLE 6.8

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY ONE-WAY DISTANCE FROM HOMETOWN TO COLLEGE

One-way Distance from Hometown to College	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
10 miles or less	55.8	52.9	55.0	22.9	39.2	47.3	12.1
11 to 20 miles	16.9	13.4	14.7	13.0	12.5	17.7	8.5
21 to 30 miles	9.4	9.6	7.6	9.8	9.9	12.4	7.1
More than 30 miles	18.0	24.2	22.7	54.3	38.5	22.7	72.3
TOTAL (Number)	100.1 (1714)	100.1 (157)	100.0 (687)	100.0 (92)	100.1 (859)	100.1 (1396)	100.0 (141)

no surprise. In addition, more than one-half of the students in home economics select the greatest distance category. At the other extreme, over one-half of the students in business-office, distributive education, and health occupations have hometowns 10 miles or less from the college where they are enrolled.

OCCUPATIONAL PROGRAM SELECTION

Very little research has been reported on the factors influencing occupational program selection on the junior college level. In an effort to contribute to our understanding of this area, the major discussions which follow are centered around the time periods when the students formulated their present occupational plans, sources of information concerning program of study, most important influence relative to the choice of study program, and influence of previous work experience on selection of occupational programs.

DECISIONS ABOUT OCCUPATIONAL CAREERS

To our knowledge no data exist focusing on the time period when junior college occupational students formulated their occupational plans. Some related data on junior college transfer students are available. For example, Knoell and Medsker (1964) reported the periods when a large sample of students reached a general commitment to attend college. These results may be summarized as follows: 52 percent, prior to the junior year in high school; 17 percent, either during the junior or senior year of high school; 19 percent, after high school; and 11 percent, didn't remember. The women were found to have reached their decisions regarding college attendance much earlier than did the men. In another report by these same authors (cited in Cross, 1968), 27 percent of junior college transfer students had no firm occupational commitment prior to college entry, and 36 percent changed their occupational choices at one time or other during their junior college career.

In contrast to junior college transfer students, the critical point for career decisions occurs considerably earlier for students enrolled in occupational programs. Consequently, one would expect that an overwhelming majority of the respondents in this study's sample would have formulated their occupational plans prior to enrolling in junior college. Additionally, it would be expected that the percentage would exceed that of the transfer students in the Knoell and Medsker research. Both of these hypotheses are confirmed by the data contained in Table 6.9.

Examining Table 6.9 further, certain other findings are important to stress. Nearly six out of 10 students either made their occupational plans during or following the senior year of

TABLE 6.9

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY PERIOD WHEN PRESENT OCCUPATIONAL PLANS WERE FORMULATED

"During what grade of school did you decide your present occupational plans?"	Number	Percent
Grade school	263	5.4
Junior high school (7-9)	420	8.6
Sophomore year in high school	429	8.8
Junior year in high school	638	13.1
Senior year in high school	1134	23.3
Period between high school and college	739	15.2
Freshman year of junior college	470	9.7
Sophomore year of junior college	183	3.8
Still undecided	200	4.1
Don't remember	387	8.0
TOTAL	(4863)	100.0

high school. It is likely, then, that many of the students did not decide their occupational goals soon enough to pursue the type of high school program which would be the most compatible with their eventual job careers. Additionally, a large number of students claim to have decided their work careers in the period between high school graduation and the beginning of college. This suggests the advisability of young people having easy access to guidance-counseling personnel and facilities at least during the immediate post-high school period.

SOURCES OF INFORMATION ABOUT PROGRAMS

The availability of an increasing quantity and variety of occupational programs on the post-secondary level must be conveyed to all potential students. Hence, it is relevant in the present research to determine what sources served as agents of diffusion regarding occupational programs. From a list of seven sources, the student selected the response which most approximated the source of information about the particular program that he is pursuing. Table 6.10 informs us that the informational sources breakdown fairly evenly, with roughly one-third of the sample representing each of three broad categories--high school personnel, kinship-friendship sources, and "others." The high school counselor served as an information source twice as often as did the high school teacher. Friends served in this capacity almost twice as often as parents and other relatives. The relatively insignificant role played by the high school vocational teacher leaves much room for improvement. We have no way of knowing the specific sources included in the "others" category; however, they probably include college representatives, mass media advertisements, and "cannot recalls."

The sources of occupational program information, according to service area, are given in Figure VI-13. Several observations are suggested by this figure. In the first place, the greatest differences in percentages are characteristic of high school vocational or guidance counselors, who are specified as informational sources by as low as 13.4 percent of the students in health occupations and as high as 32.6 percent by the majors in home economics. A significant proportion of the enrollees in health occupations suggested "others" as sources of information. "Friends" are also reported quite frequently by the health occupations subgroup as sources of program information.

It merits mentioning that the sex of the respondent has comparatively little relationship to the source of program information. However, this does not appear to be the case for age (categorized as to 20 years or less and 21 years or more) and marital status (categorized as to married/formerly married or single). In fact, not only does controlling for age and sex introduce considerable variation in the distributions, but they tend to vary in the same directions (see Figures VI-14 and VI-15). This is understandable since, in general, the older the respondent, the greater the chances he will be married or formerly married, or vice versa. The younger and single students lead the older and married/formerly married as recipients of program information from school personnel and parents. The converse pattern is true with reference to other relatives, friends, and "others." This finding also underscores the need for professional guidance and counseling opportunities for non-student populations.

TABLE 6.10

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY SOURCE OF PROGRAM INFORMATION

"Select the response below which comes closest to suggesting how you learned about the particular program of study in which you are presently enrolled."	Number	Percent
High school vocational or guidance counselor	1009	20.0
High school vocational education teacher	359	7.1
Other high school teacher	202	4.0
Parents	362	7.2
Other relatives	265	5.2
Friends	1048	20.7
Others	1812	35.8
TOTAL	(5057)	100.0

MOST IMPORTANT INFLUENCE IN PROGRAM CHOICE

A question attempted to identify who influenced the student most in his choice of an occupationally-oriented program. Unfortunately, only slightly more than one-half of the respondents were able to identify one of nine specifically listed categories. As such, the data are somewhat limited; only the results relative to total sample and sex subsamples are presented in this report (see Figure VI-16).

Excluding the percentage of respondents selecting the "others" category, "father" and "friends or relatives" are identified respectively by 11.7 percent and 10.8 percent of the total sample as the individuals influencing program selection the most. The "guidance counselor" and "mother" follow close behind. Roughly

FIGURE VI-13

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SOURCE OF PROGRAM INFORMATION, BY SERVICE AREA

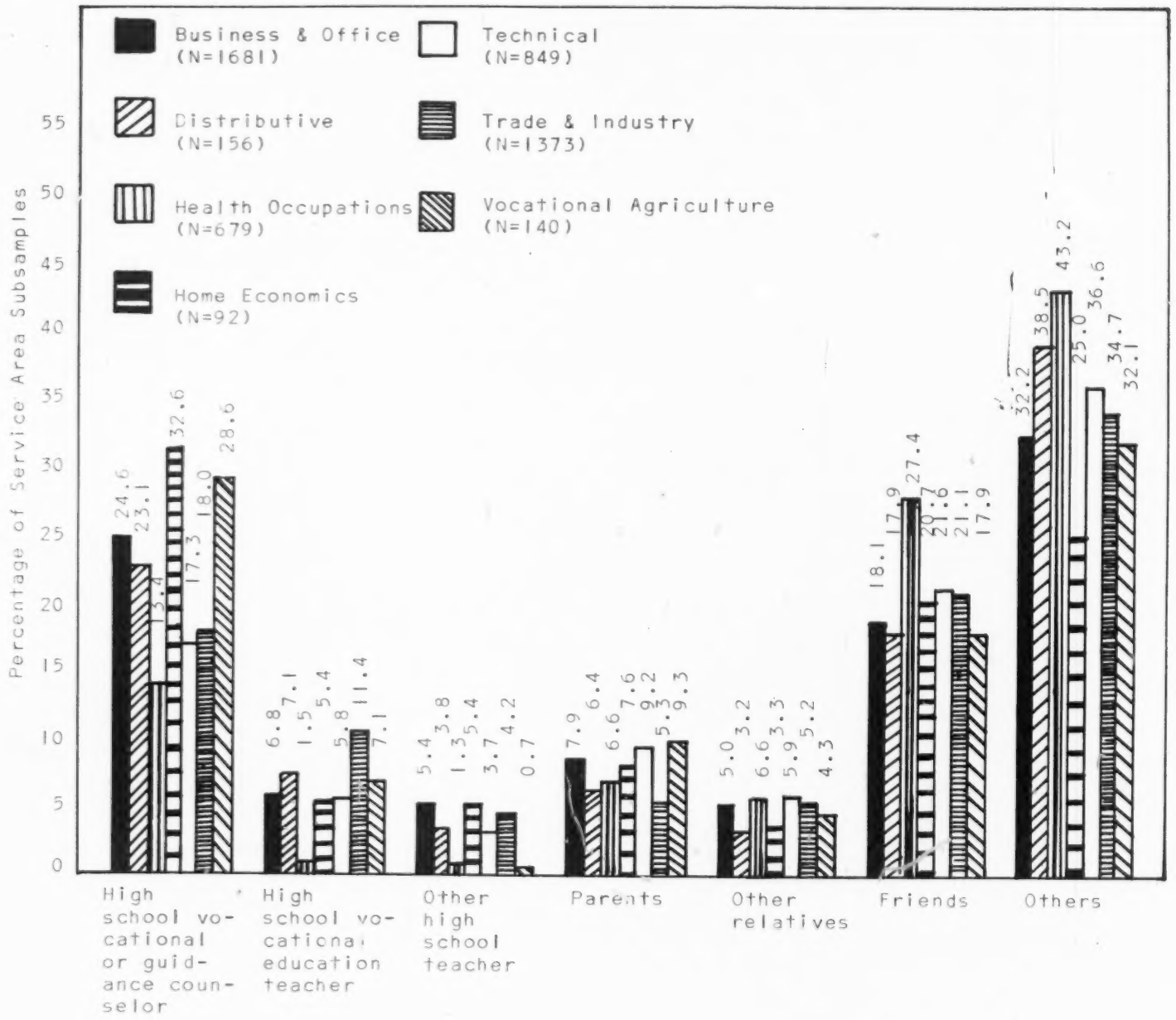


FIGURE VI-14

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SOURCE OF PROGRAM INFORMATION, BY MARITAL STATUS

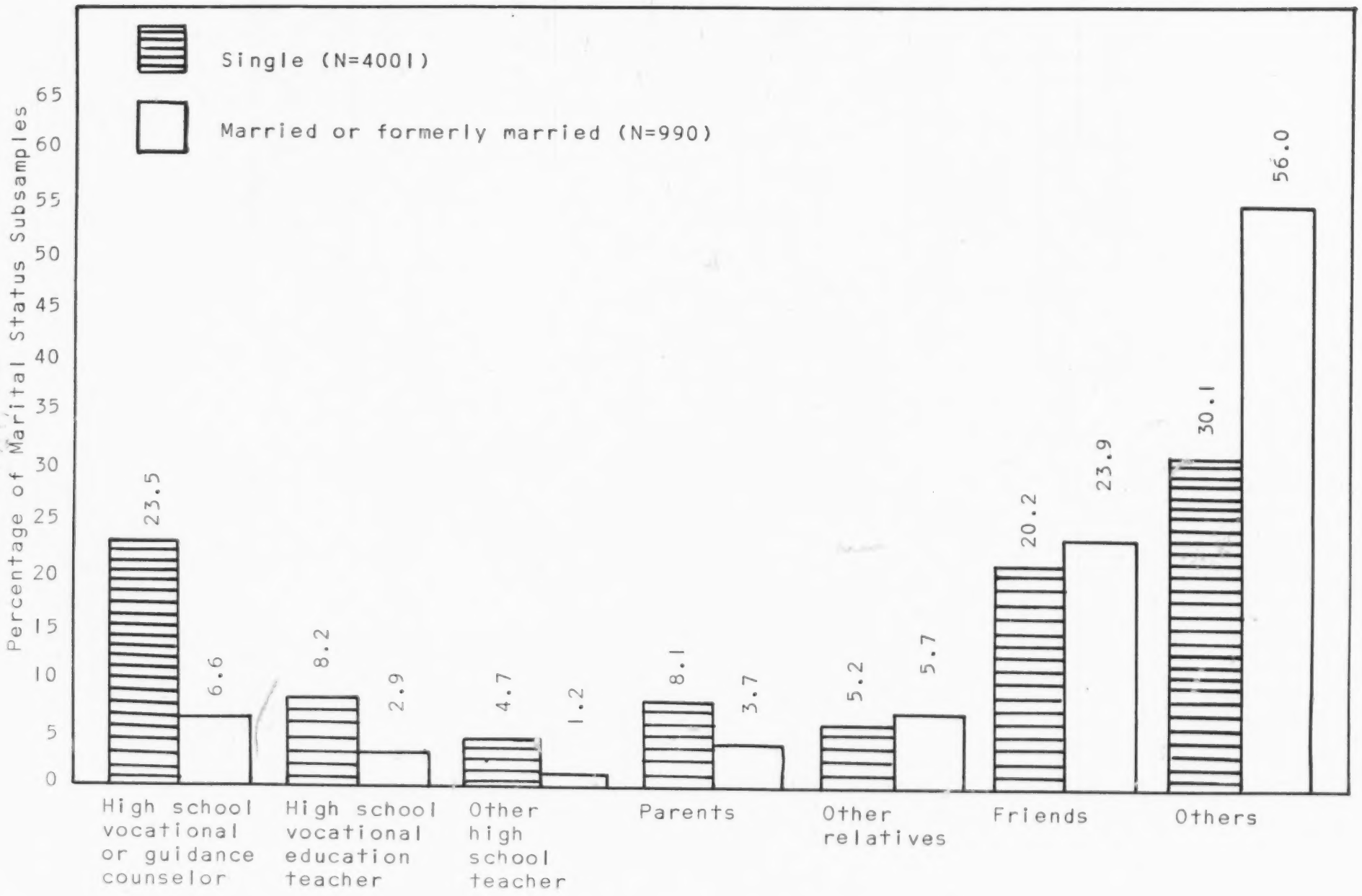


FIGURE VI-15

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO SOURCE OF PROGRAM INFORMATION, BY AGE

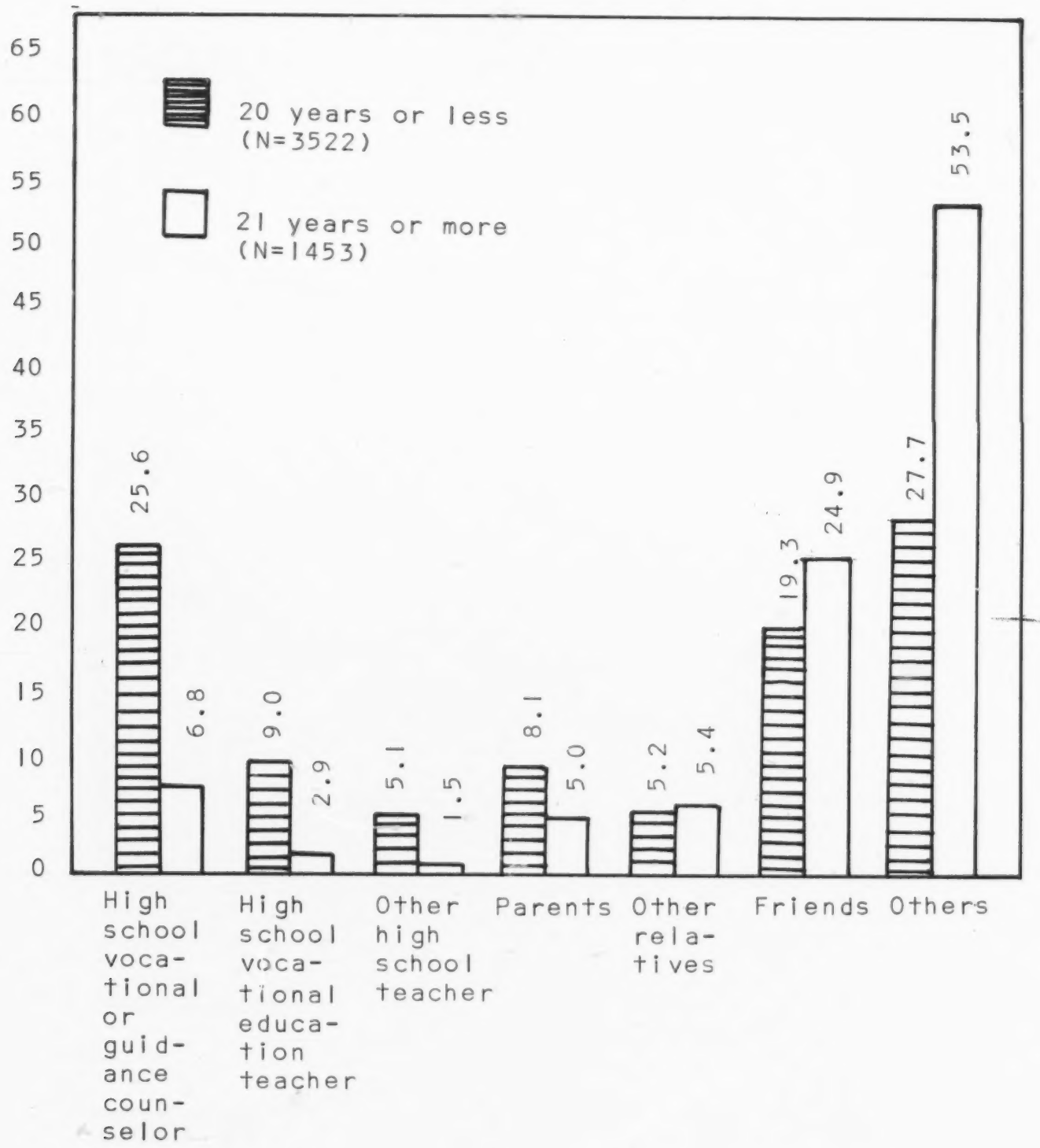
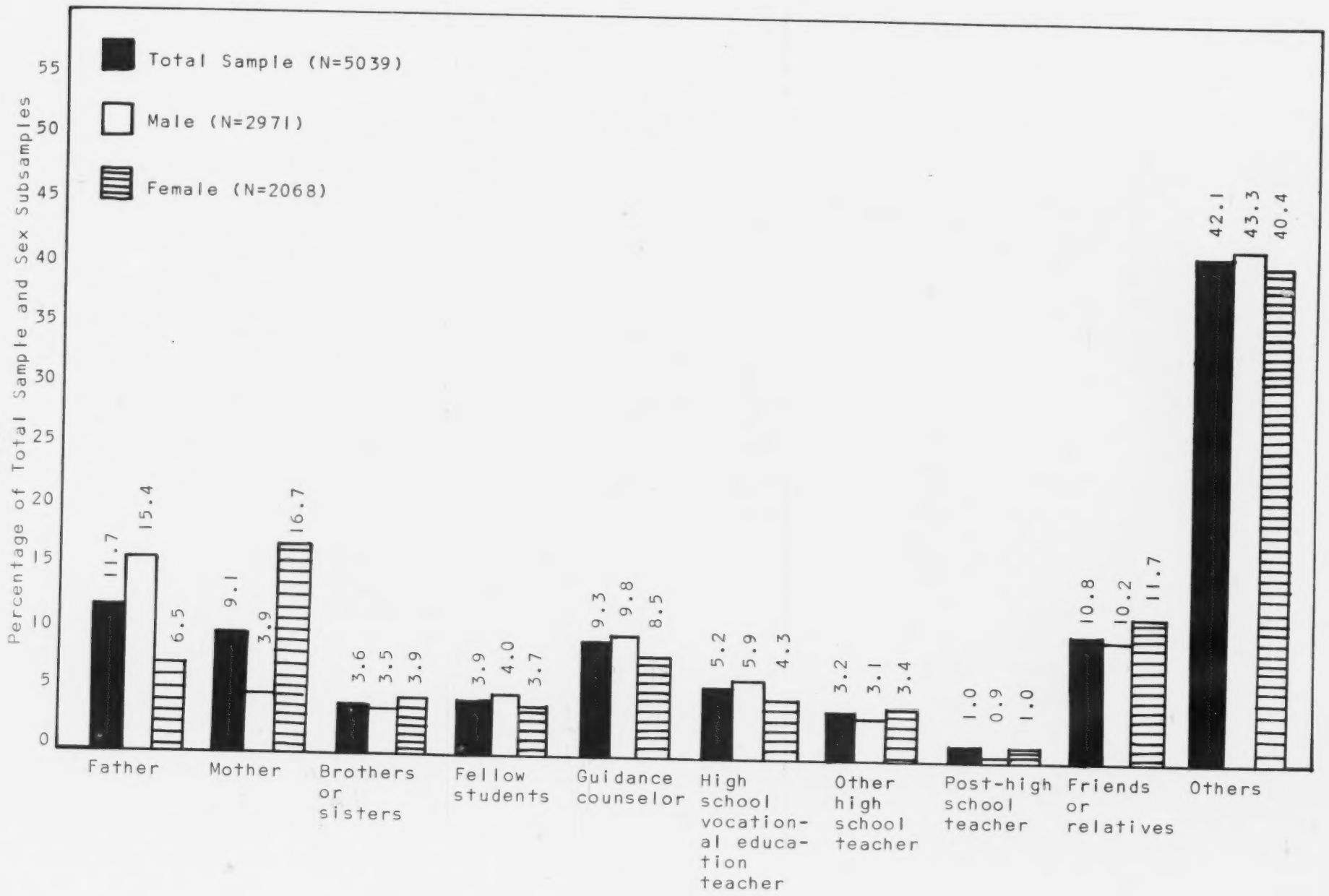


FIGURE VI-16

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO MOST IMPORTANT INFLUENCE IN PROGRAM CHOICE, BY TOTAL SAMPLE AND SEX



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the same percentages of males and females selected each of the categories with the exceptions of the "father" and "mother" categories; the former is selected more often by males, the latter by females.

PREVIOUS WORK-OCCUPATIONAL PROGRAM RELATIONSHIP

In the next chapter, an attempt will be made to determine whether employed students perceive a relationship between their present jobs and programs of study. At this time, data are presented concerning the degree to which previous work experience influenced the respondent to enter the occupational field for which he is preparing. The responses for the total sample and sex subsamples are depicted in Figure VI-17.

This table reveals a high percentage (45 percent) of the junior college vocational-technical students indicate "small" or "very small" work experience influence on their choice of programs. However, if the percentage of students indicating less than average influence in Figure VI-17 is compared with the percentage in Table 6.2, indicating they did not have a full-time job, there is a remarkably close correspondence. Assuming these two groups are roughly the same students, it is likely that those students with full-time work experience considered that experience as influencing their particular program choices. The present data do not indicate the direction of influence.

It should also be noted that the difference between sex subgroups as to perceived influence of previous work experience on program selection is limited. There is a slight tendency for the influence to be greater for the men in the sample.

Are the percentages of students who revealed that previous work experience influenced program selection uniformly distributed across service areas? According to Table 6.11, the question must be answered negatively. Vocational agriculture and home economics service areas have been selected to a great extent because of the influence of previous work experience. Distributive education as a choice also appears to be highly influenced by previous work experience. Business-office education and trade-industrial education are chosen, relatively speaking, without prior work experience playing much of a part in that choice. Health occupations and technical education are somewhat intermediate in this respect.

GOALS FOR ATTENDING COLLEGE

From 10 possibilities, the students were asked to choose their most important and second most important goals in attending college. Since these students were enrolled in occupational programs, one

FIGURE VI-17

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO THE EXTENT WHICH PREVIOUS WORK INFLUENCED SELECTION OF OCCUPATIONAL PROGRAM, BY TOTAL SAMPLE AND SEX

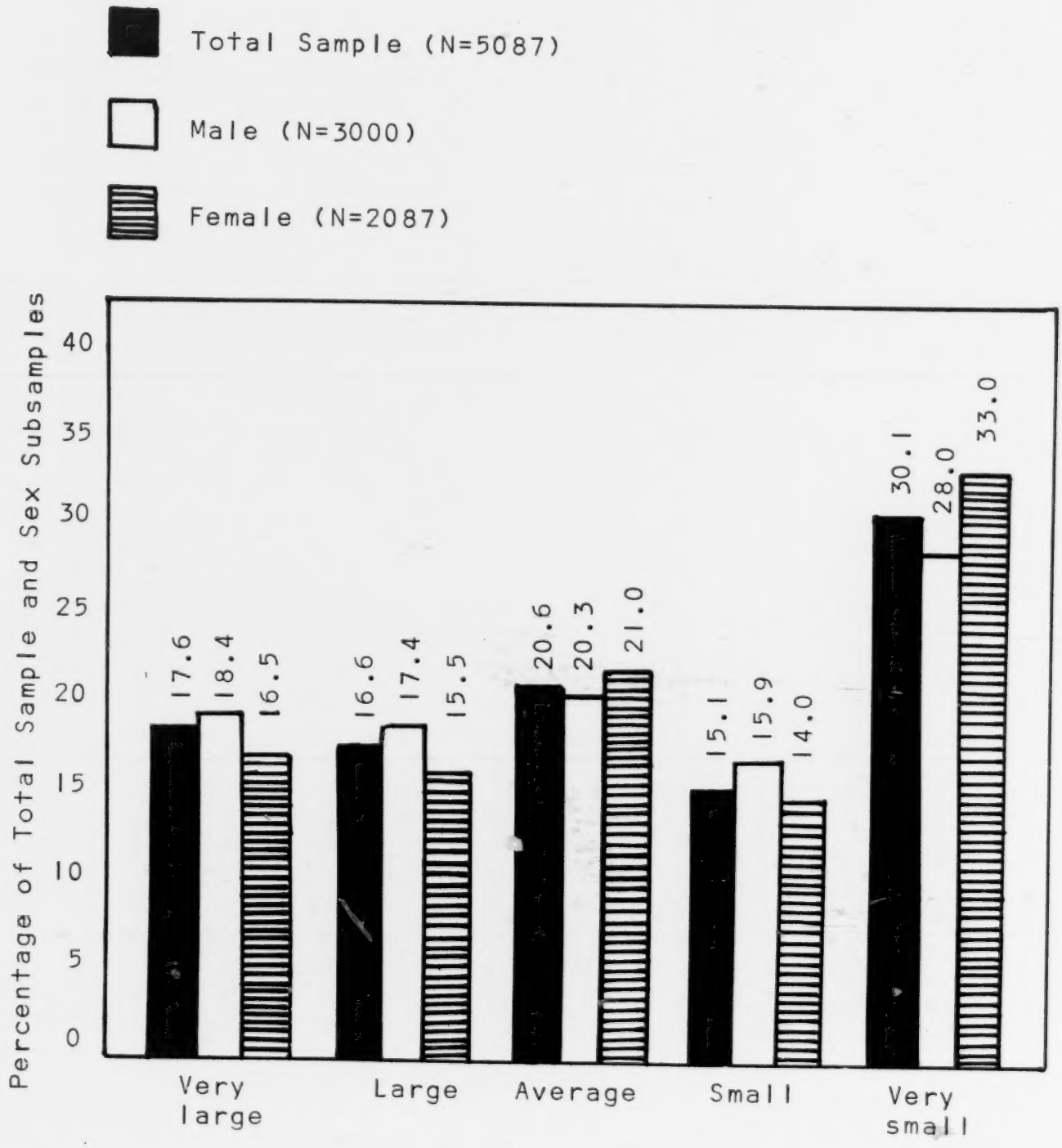

TABLE 6.11

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO THE EXTENT WHICH PREVIOUS WORK INFLUENCED SELECTION OF OCCUPATIONAL PROGRAM, BY SERVICE AREA

"To what extent has your previous work experience influenced you to enter the occupational field for which you are preparing?"	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Very large or large	31.3	42.2	37.6	45.1	36.0	31.5	50.7
Average	22.4	19.9	16.2	21.5	19.9	21.6	17.1
Small or very small	46.3	37.9	46.2	33.4	44.2	46.8	32.2
TOTAL (Number)	100.0 (1718)	100.0 (161)	100.0 (691)	100.0 (93)	100.1 (866)	99.9 (1412)	100.0 (140)

would expect that most of them would be oriented towards jobs and employment. Over three-fifths of the sample selected either "to secure vocational or professional training to obtain a job" or "to earn a higher income" as their most important preferences. Almost one-half of the respondents considered these two goals as second in importance. However, it should also be emphasized that slightly more than one out of four of the respondents select "to develop my mind and intellectual abilities" as their primary goal, as well as their second goal for attending college. These and other results are presented in Figure VI-18.

Baird, Richards, and Shevel (1969) asked a large sample of junior college students, most of whom were planning to transfer to four-year colleges, to identify their most important goals in attending college. In comparison to the exclusively occupationally-oriented students who participated in the present research, one would expect the goals of the respondents in the study by Baird, Richards, and Shevel to be less oriented toward their future careers, and more consistent with the values of a liberal education. This prediction is substantiated to some extent by Table 6.12. In the final analysis, however, the findings of the two studies are quite similar.

Additional information relative to the goals of the junior college occupational students are presented by controlling for sex and race. With respect to classifying the subjects as to sex, two major variations exist (see Table 6.13). Significantly more males indicate that "to earn a higher income" represents the most important goal for attending college; a proportionately greater number of females select "to secure vocational or professional training to obtain a job." One major difference characterizes the distribution of purported goals according to race. As pictured in Table 6.14, proportionately more of the memberships in the two minority groups favored "to secure vocational or professional training to obtain a job" than is the case for the white respondents.

SUMMARY

The chapter presents data on a variety of subjects having direct relationships to the "flow" of students from high school to enrollment in junior college occupational programs. With reference to initial post-high school activity, it is found that almost two-thirds of the occupational students either enrolled in their present junior college, or attended another school. About one-fourth of the students worked prior to attending college. Both of these fractions differ significantly from those reported in a study of "mostly transfer students," who were more likely to come directly to their present schools after high school. There is a tendency for lower status respondents in the present study

FIGURE VI-18

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO MOST IMPORTANT AND SECOND MOST IMPORTANT GOAL FOR ATTENDING COLLEGE, BY TOTAL SAMPLE

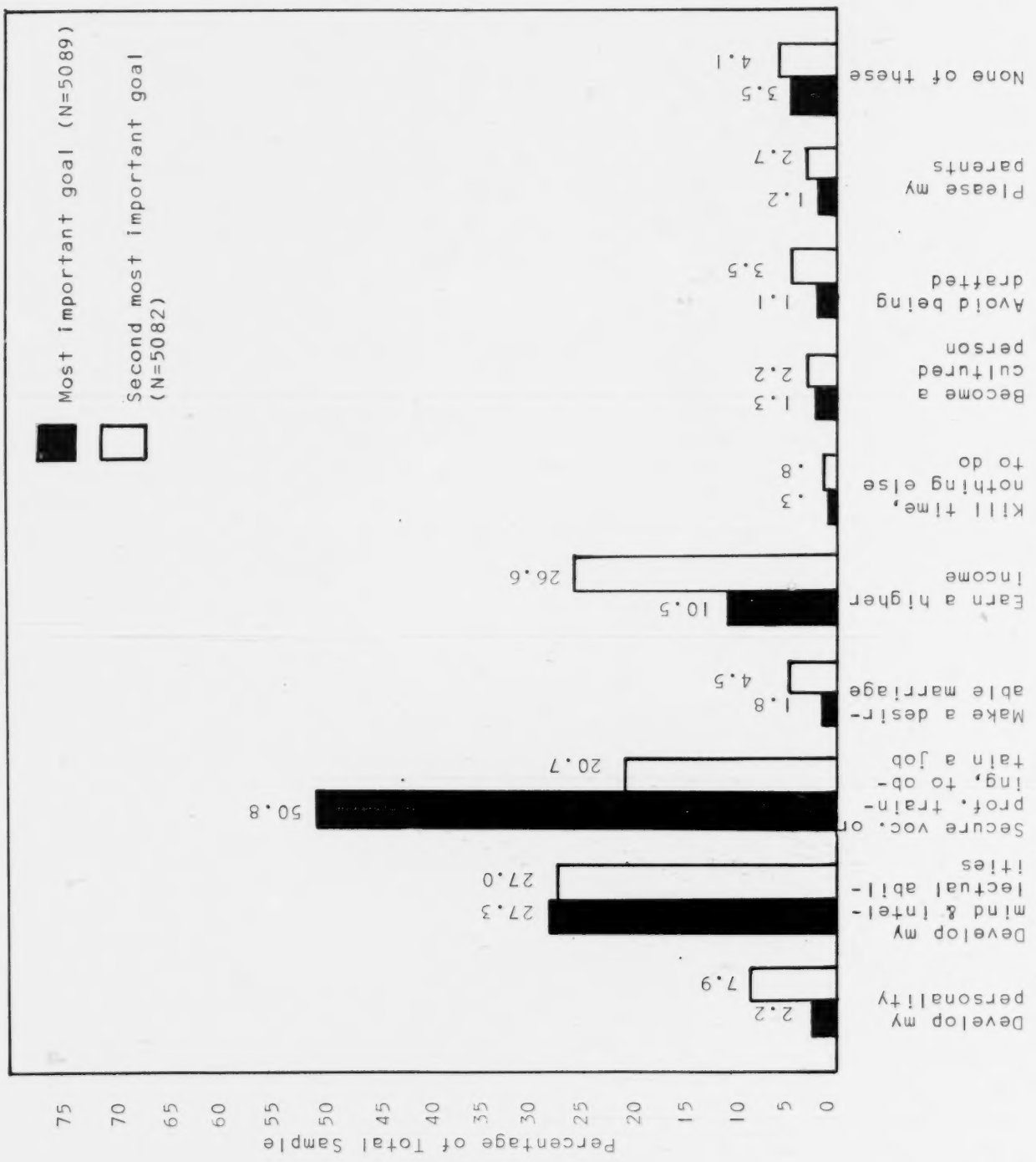

TABLE 6.12

PERCENTAGE COMPARISON BETWEEN THE MOST IMPORTANT GOAL IN ATTENDING COLLEGE AS SELECTED BY THE JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN THE PRESENT STUDY WITH TWO-YEAR GRADUATES OF THE BAIRD, RICHARDS, AND SHEVEL STUDY*

Most Important Goal in Attending College	Baird, Richards, and Shevel Study **2-Year College Graduates	Present Study
To develop my personality	1.1	2.2
To develop my mind and intellectual abilities	33.2	27.3
To secure vocational or professional training to obtain a job	45.5	50.8
To make a desirable marriage	.5	1.8
To earn a higher income	10.8	10.5
To become a cultured person	2.0	1.3
***Miscellaneous, non-comparable	3.1	2.6
None of these	4.0	3.5
TOTAL (Number)	100.2 (4009)	100.0 (5089)

*(Baird, Richards, and Shevel, 1969).
**Most of these respondents were transfer students.
***There are three response categories in each study that do not match.

TABLE 6.13

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO MOST IMPORTANT GOAL FOR ATTENDING COLLEGE, BY SEX

"Choose your most important goal in attending college."	Sex	
	Male	Female
To develop my personality	2.1	2.3
To develop my mind and intellectual abilities	28.1	26.2
To secure vocational or professional training to obtain a job	47.0	56.6
To make a desirable marriage	1.8	1.7
To earn a higher income	13.8	5.8
To kill time, nothing else to do	0.4	0.2
To become a cultured person	1.0	1.8
To avoid being drafted	1.7	0.0
To please my parents	0.9	1.4
None of these	3.3	4.0
TOTAL (Number)	100.1 (2973)	100.0 (2076)

not only to work following high school, but to work for longer periods of time. On the whole, upper status respondents generally go directly from high school to college. In comparison to men, women also reflect this pattern. It is hypothesized that many students from upper socioeconomic backgrounds, in particular, attend another post-high institution first, and after failing to meet academic expectations, use junior colleges as a "second chance."

TABLE 6.14

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO MOST IMPORTANT GOAL FOR ATTENDING COLLEGE, BY RACE

"Choose your most important goal in attending college."	Race		
	White	Black	Oriental
To develop my personality	2.2	1.9	1.2
To develop my mind and intellectual abilities	27.3	24.2	28.9
To secure vocational or professional training to obtain a job	50.6	58.1	57.8
To make a desirable marriage	1.7	1.9	0.0
To earn a higher income	10.8	8.8	6.0
To kill time, nothing else to do	0.3	0.0	0.0
To become a cultured person	1.3	1.2	0.0
To avoid being drafted	1.1	0.0	3.6
To please my parents	1.2	0.8	0.0
None of these	3.4	3.1	2.4
TOTAL (Number)	99.9 (4636)	100.0 (260)	99.9 (83)

Certain major findings resulted with regard to the extent of parental encouragement concerning college attendance. At least two-thirds of both parents of the occupational students either took it for granted that their children would go to college, or actively urged them to go to college. The mothers, more so than fathers, are especially involved in actively urging their children to go to college. The influence of socioeconomic background is consistent with what was expected. Comparison with another study indicates that, percentage-wise, the occupational students rank

behind four-year college students and mostly transfer junior college students, and ahead of noncollege students, in terms of the extent of encouragement provided by parents concerning college attendance.

The respondents were asked to identify the most important, second most important, and third most important reasons why they are attending the colleges where they are enrolled. On the basis of scores arrived at by assigning weights to responses according to the order in which they were ranked by each subject, the responses of "close to home," "low cost," and "special courses or programs offered" account for 67.2 percent of the total possible points. Taken separately, these three responses have fairly equal individual scores. In terms of the most important reason alone, about three-fourths of the students identified the three factors mentioned above, but "special courses or programs offered" had a considerably higher score than either of the others. Certain differences are also found when the sample is classified as to sex, service area, and socioeconomic status level.

Data are reported on the perceived importance attached by parents to the respondent's attendance at the junior college where he is presently enrolled. The results reveal over 70 percent of the sample perceive the relative importance to be less than "very important" or "quite important."

About one in four of the sample attends a college more than 30 miles from his hometown. There is a tendency for males and individuals who are single or married (without children) to be enrolled in schools further removed from their hometowns than is the case for their counterparts. On the whole, students in vocational agriculture and health occupations attend colleges located the greatest distances from their homes, as compared with respondents in the other service areas.

Myriad factors and experiences impinge upon occupational program selection. This includes the time period when a person reaches a firm occupational commitment. Although this study's findings suggest occupational students are "early deciders" in comparison to the junior college transfer students in another study, more than one-half of the sample decided after their junior year in high school, and a large percentage of this group decided after high school.

High school guidance counselors and "friends" are each selected by about one-fifth of the respondents as representing the major source of program information. Teachers, academic as well as vocational, do not rank comparatively well in this regard. Considerable variation exists across service areas, age groups, and marital statuses as to the principal sources of program information.

This study also investigated the most important influences in the choice of program. "Father" and "friends" are selected most often, with the exception of the "others" category.

Although most of the respondents indicate that previous work experience does not have a major influence on program selection, this finding is mitigated somewhat when it is realized that the percentage indicating "no influence" corresponds closely with the percentage indicating "no work experience prior to college." There is some indication that students who were full-time participants in the labor force consider work to have influenced their choice of programs. This seems to be especially true of majors in vocational agriculture and home economics.

The final section of this chapter explores the goals shared by the students for attending college. Over three-fourths of them had goals directed toward jobs and more money. However, goals reflecting a liberal arts orientation are chosen by about one-fourth of the students. This percentage is slightly less than that selected by a sample of junior college students in another study, most of whom were transfer students.

VII. SELECTED DIMENSIONS OF EDUCATIONAL AND WORK EXPERIENCES

This chapter is designed to provide additional potentially useful information about community-junior colleges and their vocational-technical students. In the previous chapter, certain factors and processes were discussed which have implications for the transition of students from high school to junior college. In the present chapter, various aspects of educational and work experiences are examined as they pertain to the national sample of occupational students at the time of this survey.

PRESENT EDUCATIONAL EXPERIENCE

In this section four subjects are explored--student classification, school enrollment, cooperative program participation, and evaluation of training program--which have relevance for understanding certain facets of the respondents' higher educational experience.

STUDENT CLASSIFICATION

The sampling universe for the present study consisted of junior college students defined not in terms of specific grade-level classifications (e.g., freshmen), but according to a particular program of study (i.e., vocational-technical education). Nevertheless, subjects representing each of the grade-level classifications compose the sample. An exploration of possible grade-level differences will now be made.

Other things being equal, significantly more freshmen than sophomores should be among the students participating in this study. Two explanations support this contention: (1) in recent years, the number of occupational students have increased annually, thus a freshman class should have more students; and (2) dropouts during the freshman year and between the freshman and sophomore years would reduce the potential number of sophomores.

As shown in Table 7.1, freshmen do exceed sophomores by more than 10 percent.[1] Of the 5,077 students who responded to this

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[1]As of October, 1967, the ratio of freshmen (full-time) to sophomores (full-time) enrolled in public junior colleges,

TABLE 7.1

DISTRIBUTION OF JUNIOR COLLEGE
OCCUPATIONAL STUDENTS, BY STUDENT CLASSIFICATION

"Mark on your answer sheet the number corresponding to the classification below which applies to you."	Number	Percent
Freshman, full-time	2248	44.3
Freshman, part-time	334	6.6
Sophomore, full-time	1690	33.3
Sophomore, part-time	256	5.0
Other (unclassified)	549	10.8
TOTAL	(5077)	100.0

item, 590 (11.6 percent) have part-time student statuses;[2] a slightly larger number indicated that they belonged in the "other" (unclassified)[3] student category.[4]

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regardless of program of study, was about five to two (American Association of Junior Colleges, 1969). There were 518,104 freshmen and 215,656 sophomore students enrolled in public junior colleges on a full-time basis.

[2]As of October, 1967, there were 523,688 part-time first- and second-year students in public junior colleges. They represented approximately one-third of all students enrolled on a full- or part-time basis in the public junior colleges of this country.

[3]It is being assumed that the students, who selected the "other" response category have "unclassified" statuses, however, it is realized that this may not always be the case.

[4]As of October, 1967, there were 225,616 unclassified part- and full-time students in public junior colleges. They represented about one-seventh of all students enrolled on a full- or part-time basis in the public junior colleges of this country.

Table 7.2 depicts the student classifications according to vocational-technical service area. Although several variations make summary statements difficult, a few observations are evident. First, with the exception of the distributive education and home economics subgroups, there is a greater number of freshmen than sophomores in each service area. Second, with the exception of health occupations, most of the part-time students in each program area are freshmen. Third, the "unclassified" students are disproportionately concentrated in the female dominated areas of home economics and health occupations.

When the respondents are categorized as to sex, there is a slight tendency for proportionately more males to be full-time, regardless of academic year. On the other hand, proportionately more females are part-time regardless of academic year. Women are also proportionately more numerous in the "unclassified" group (see Table 7.3).

Although data will not be presented, it should also be noted that the "Part-time" and "unclassified" students tend to be older and either married or formerly married. It should be kept in mind that the needs of "part-time" and "unclassified" students are more likely to vary in many instances, from those of the "more typical" junior college vocational enrollee. Furthermore, these two categories of students will likely increase considerably in the years to come.

SCHOOL ENROLLMENTS

Of the 739 public two-year colleges listed in the *1969 Junior College Directory*, 130 have less than 500 students, 161 have enrollments in the 500 to 599 range, 198 in the 1,000 to 1,999 student range, and 250 colleges have 2,000 or more students. What is the distribution of the vocational students according to the self-reported enrollment size of the colleges which they are attending? Table 7.4 reports that most of the respondents are enrolled in junior colleges having under 2,000 enrollees. However, about three out of seven subjects are attending institutions of 2,000 or more students.

PARTICIPATION IN COOPERATIVE PROGRAMS

Conventional cooperative programs alternate periods of classroom study with periods of work experience. Generally, the work experience is related to career interests but not necessarily. For example, there is some tendency to have work experiences which are to acquaint the individual with working and do not necessarily deal with the curriculum itself. Although cooperative education is not without its critics (Freedman, 1963), most

TABLE 7.2

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SERVICE AREA, BY STUDENT CLASSIFICATION

Student Classification	Service Area						
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture
Freshman, full-time	44.4	34.4	36.9	23.6	48.2	47.8	57.1
Freshman, part-time	8.8	7.0	5.7	10.1	3.6	5.9	5.7
Sophomore, full-time	33.9	45.2	28.6	40.4	35.9	32.5	26.4
Sophomore, part-time	6.5	4.5	6.9	2.2	3.1	4.5	0.0
Other (unclassified)	6.4	8.9	22.0	23.6	9.2	9.4	10.7
TOTAL (Number)	100.0 (1700)	100.0 (157)	100.1 (683)	99.9 (89)	100.0 (852)	100.1 (1388)	99.9 (140)

TABLE 7.3

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO SEX, BY STUDENT CLASSIFICATION

Student Classification	Sex	
	Male	Female
Freshman, full-time	45.1	43.4
Freshman, part-time	6.1	7.4
Sophomore, full-time	34.9	31.6
Sophomore, part-time	4.9	5.3
Other (unclassified)	9.0	12.2
TOTAL (Number)	100.0 (2953)	99.9 (2059)

TABLE 7.4

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY SIZE OF ENROLLMENT

"Approximately how many students are enrolled in the school you are presently attending?"	Number	Percent
Under 500	335	6.6
500 to 999	658	13.0
1000 to 1499	1229	24.3
1500 to 1999	636	12.6
2000 to 2499	414	8.2
2500 and over	1784	35.3
TOTAL	(5056)	100.0

individuals agree that a person's " . . . education becomes more meaningful when there is an opportunity for students to apply theory to practice while learning . . . ." (Lupton, 1970: 37).

Of the 5,025 junior college respondents revealing whether or not they are involved in cooperative programs, 77.5 percent reply negatively, and 22.5 percent, affirmatively. Approximately, one out of five males (N=2969) and one out of four females (N=2056) say they are participating in cooperative programs.

Further analysis of cooperative program participation is pursued by controlling for the racial groups into which the respondents are classified. As shown in Table 7.5, both minority groups have higher participation rates than do members of the white subgroup.

TABLE 7.5

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO WHETHER OR NOT THEY ARE PARTICIPANTS OF COOPERATIVE PROGRAMS, BY RACE

"Are you presently a participant in a cooperative program?"	Race		
	White	Black	Oriental
Yes	21.9	31.3	24.4
No	78.1	68.7	75.6
TOTAL (Number)	100.0 (4615)	100.0 (259)	100.0 (82)

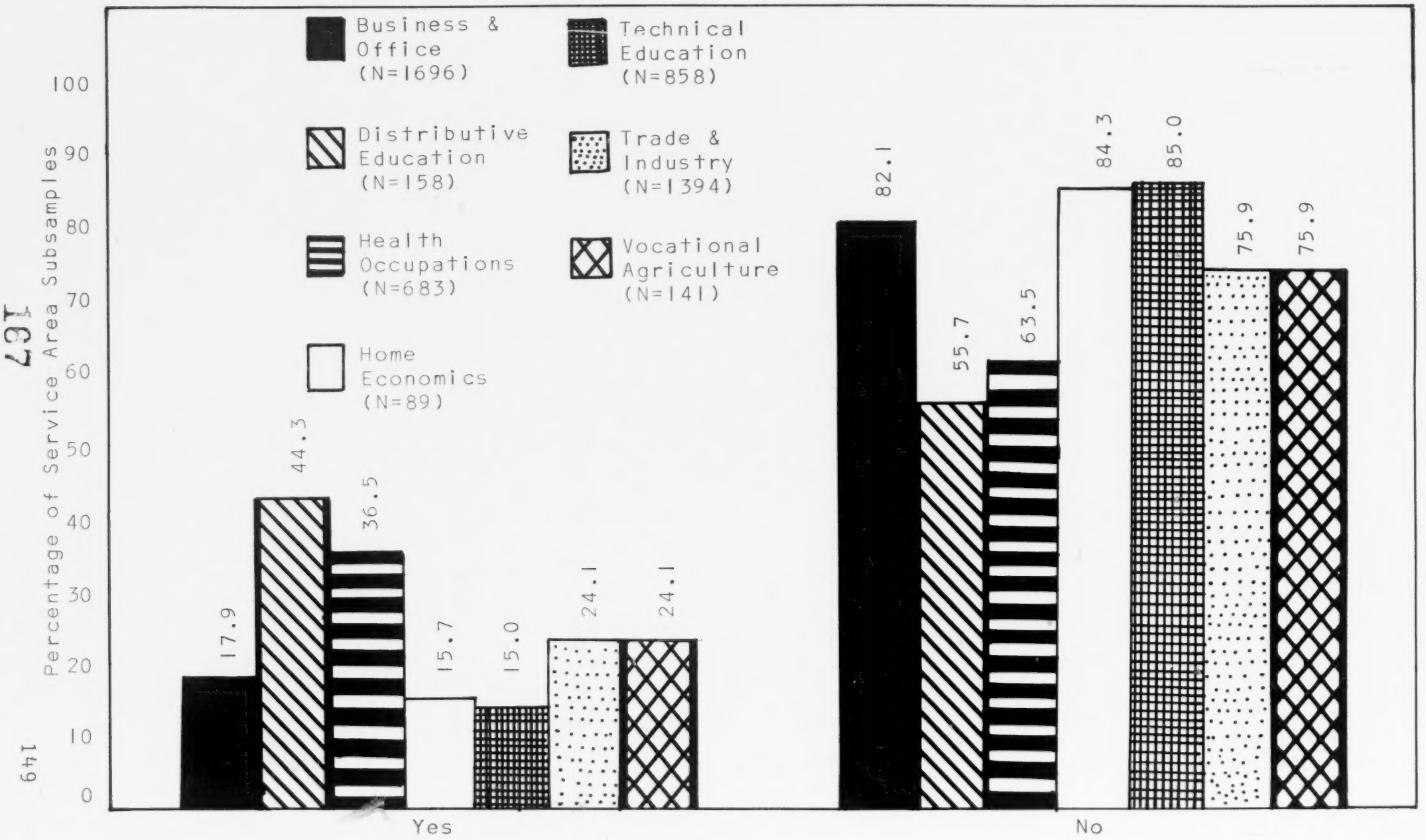
With the exception of the vocational agriculture and trade-industrial service areas, the rate of participation in cooperative education deviates importantly from that characteristic of the total sample. As shown in Figure VII-1, the highest rates of involvement apply to the distributive education and health occupations subgroups.

ADEQUACY OF TRAINING PROGRAM

Cross (1968) indicated " . . . we really do not know how vocationally oriented students feel about their junior college

FIGURE VII-I

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO WHETHER OR NOT THEY PARTICIPATE IN COOPERATIVE EDUCATION PROGRAMS, BY SERVICE AREA



experiences . . . ." This study asked one question ("In your opinion, how adequate is the occupational training you are receiving in preparing you for the job you want to enter when you finish?") intended to contribute to the literature in this area.

According to Figure VII-2, the vast majority of the students, or about nine out of 10, view their occupational training quite positively, maintaining it is either "very adequate" or "fairly adequate." As a group, females are more favorably impressed than males.

Baird, Richards, and Shevel (1969) presented data bearing on the topic under consideration. A question[5] similar to the one indicated above was asked a large sample of two-year college graduates. The responses to these two questions are specified in Table 7.6. Although the comparability of the data may be challenged, the results of the two investigations are remarkably similar. Apparently, for the most part, the community-junior college enrollees and graduates perceive their institutions as doing a good job preparing them for future occupational pursuits. It would be of interest to know how junior college dropouts evaluate their aborted occupational training experiences, as well as how graduates evaluate their post-secondary occupational training, following labor market experience.

The evaluation patterns of the vocational students are also examined according to service area. The junior college students pursuing health occupations and vocational agriculture curricula judge their occupational training most favorably, as more than 90 percent of each specialty area ascribed "very adequate" or "fairly adequate" evaluations. Distributive education students are the most critical of their programs of study (see Figure VII-3).

It is also apparent that the training evaluation patterns do not vary importantly from one geographic subregion to another. As portrayed in Table 7.7, the percentage range of students in the geographic areas who accord their occupational training either of the two highest ratings extends from 86.4 percent (Pacific) to 92.4 percent (East South Central).

At the most, the findings presented above represent only a beginning[6] toward understanding the judgements held by vocationally-oriented enrollees of junior colleges concerning their educational

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[5]"If you plan to obtain a full-time job next year, how well do you think your college has prepared you for the work you will do?"

[6]Other data of possible interest may be found in Baird, Richards, and Shevel (1969).

FIGURE VII-2

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO EVALUATION OF TRAINING, BY TOTAL SAMPLE AND SEX

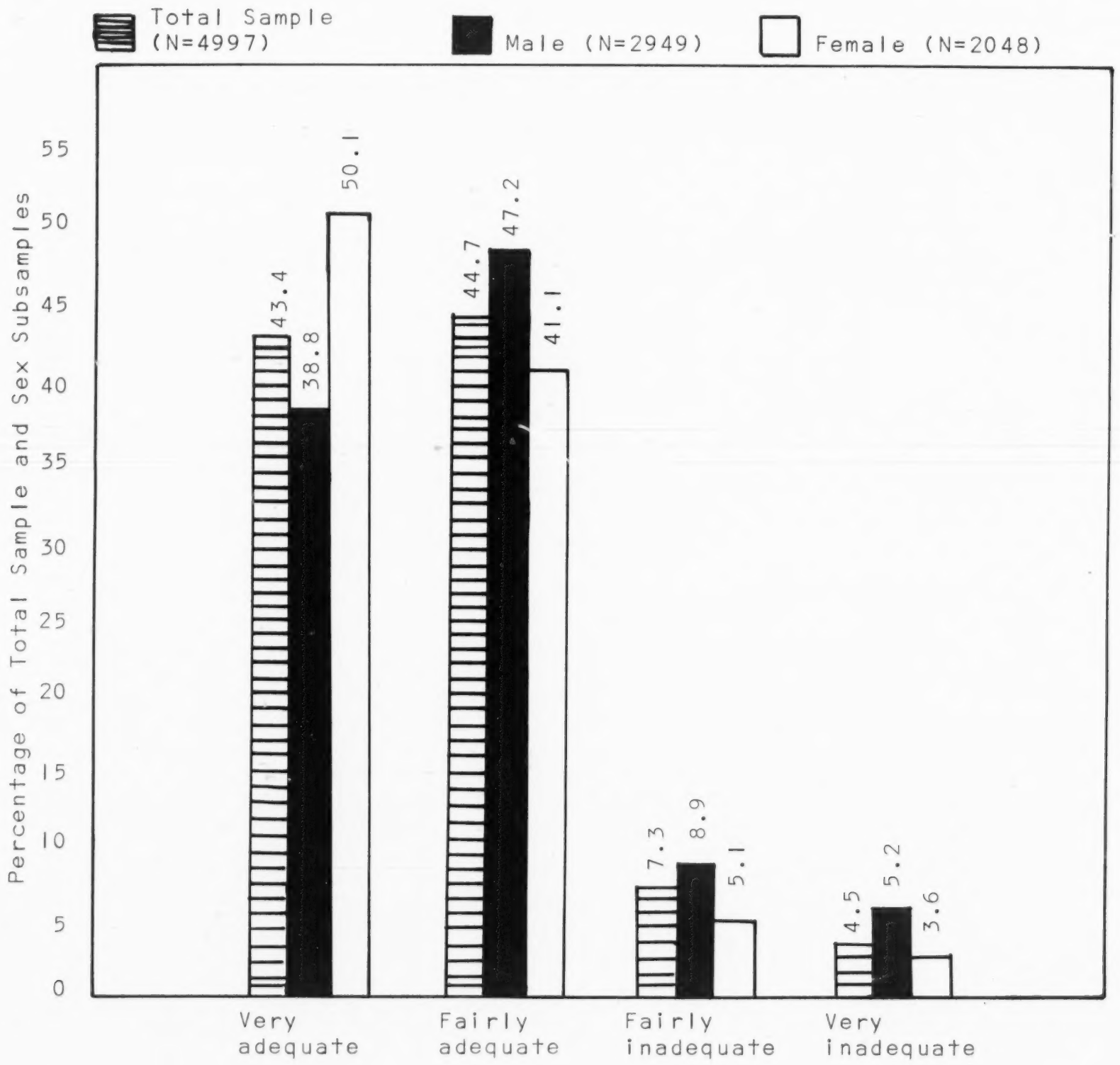

TABLE 7.6

PERCENTAGE COMPARISON OF TRAINING EVALUATIONS BY JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN THE PRESENT STUDY WITH THOSE OF TWO-YEAR COLLEGE STUDENTS IN THE BAIRD, RICHARDS, AND SHEVEL STUDY*

Evaluations of Occupational Training			
Baird, Richards, and Shevel Study	Present Study	Baird, Richards, and Shevel Study	Present Study
Extremely well Very well	Very adequate	45.4	43.4
Fairly well	Fairly adequate	44.1	44.7
Somewhat poorly	Fairly inadequate	5.6	7.3
Very poorly	Very inadequate	4.9	4.5
TOTAL (Number)		100.0 (**)	99.9 (4997)

*(Baird, Richards, and Shevel, 1969)

**The questionnaire for this study was administered to 4,009 students at 29 two-year colleges. The number of junior college graduates who responded to the occupational training item was not reported.

FIGURE VII-3

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO EVALUATION OF TRAINING, BY SERVICE AREA

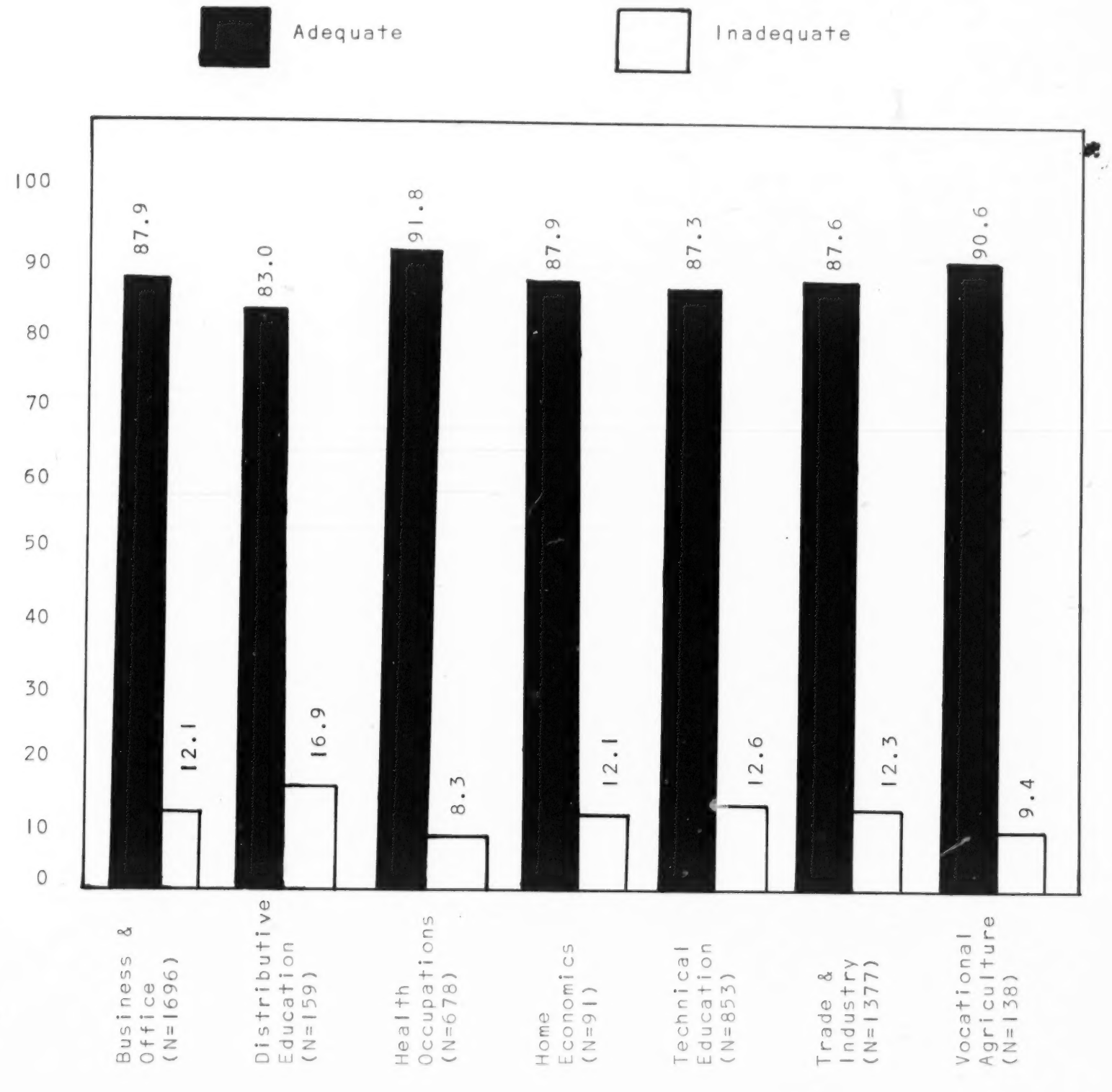

TABLE 7.7

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO EVALUATION OF TRAINING, BY GEOGRAPHIC SUBREGION

Evaluation of Occupational Training	Geographic Subregion								
	New England	Middle Atlantic	South Atlantic	East South Central	East North Central	West North Central	West South Central	Mountain	Pacific
Very Adequate	46.4	34.0	45.4	55.4	42.3	63.4	49.4	45.7	42.6
Fairly Adequate	42.3	52.0	43.9	37.0	47.3	27.4	41.0	45.7	43.8
Fairly Inadequate	6.2	8.4	5.6	5.5	6.5	3.7	5.9	5.4	9.1
Very Inadequate	5.1	5.7	5.1	2.1	3.8	5.5	3.7	3.2	4.6
TOTAL (Number)	100.0 (274)	100.1 (812)	100.0 (392)	100.0 (289)	99.9 (940)	100.0 (164)	100.0 (271)	100.0 (186)	100.1 (1679)

experiences. Much research is needed which focuses upon the nature of perceived training inadequacies so that, where possible, appropriate steps can be taken aimed toward their reduction. Also, evaluations by the industries served need to be done.

PRESENT WORK EXPERIENCE

For students pursuing occupational programs, knowledge related direc.ly or indirectly to their work experience assumes added importance. With this in mind, the following topics will be considered: main source of financial support, employment while attending college, and job-program relationship.

MAIN SOURCE OF SUPPORT

It was demonstrated earlier that proportionately more junior college students come from lower socioeconomic backgrounds than do their counterparts in four-year colleges and universities. As such, the matter of finances is especially important to the individuals on whom this report is based.

At least one major study has already shown that two-year college students differ from students in four-year colleges and universities as to their primary sources of financial support (Astin, *et al.*, 1967). For example, two-year college students obtain a greater proportion of their support through summer employment, employment while attending college, and personal savings. There is a tendency for two-year public college students to lead students attending private colleges in the percentage securing money through summer employment and employment during the school year. In comparison to two-year college students, and especially those attending public institutions, larger percentages of four-year college students reported having received scholarships, parental aid, federal government assistance, and loans. The Astin, Panos, and Creager study also revealed the financial patterns varied for men and women. Women were generally more likely to rely on parents for a major portion of their support during the freshman year. In contrast, summer jobs were much more important for men. Junior college males relied most heavily on employment and least likely on support from parents. Personal savings were used by a larger portion of men than women.

Each respondent in the present study was asked to identify one of nine response categories which represented his main source of financial support while attending college. As reported in Table 7.8, one-third of the sample are self-supporting; almost two-fifths of the sample specify receiving support from their parents.

TABLE 7.8

DISTRIBUTION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY MAIN SOURCE OF FINANCIAL SUPPORT WHILE ATTENDING COLLEGE

Main Source of Financial Support	Number	Percent
Self-Supporting	1686	33.2
Parents	1946	38.3
Other Relatives	142	2.8
Personal Savings	284	5.6
Loan	184	3.6
Governmental assistance, other than loans	414	8.2
Scholarship	139	2.7
Employer paying for course	43	.8
Other	238	4.7
TOTAL	(5076)	99.9

Use of different means of evaluations preclude a meaningful comparison between the financial patterns reported in the Astin, *et al.* study and those found in the present research. However, it is our general impression that the results of this research are more comparable to those indicated by Astin, *et al.* as being characteristic of the two-year public college subpopulation.

As was the case in the investigation by Astin, *et al.*, a much larger proportion of the male students in the present research are self-supporting. Furthermore, a considerably larger percentage of the females receive parental assistance (see Figure VII-4).

Table 7.9 provides additional information relative to the main financial sources as identified by the national sample of

FIGURE VII-4

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO MAIN SOURCE OF FINANCIAL SUPPORT WHILE ATTENDING SCHOOL, BY SEX

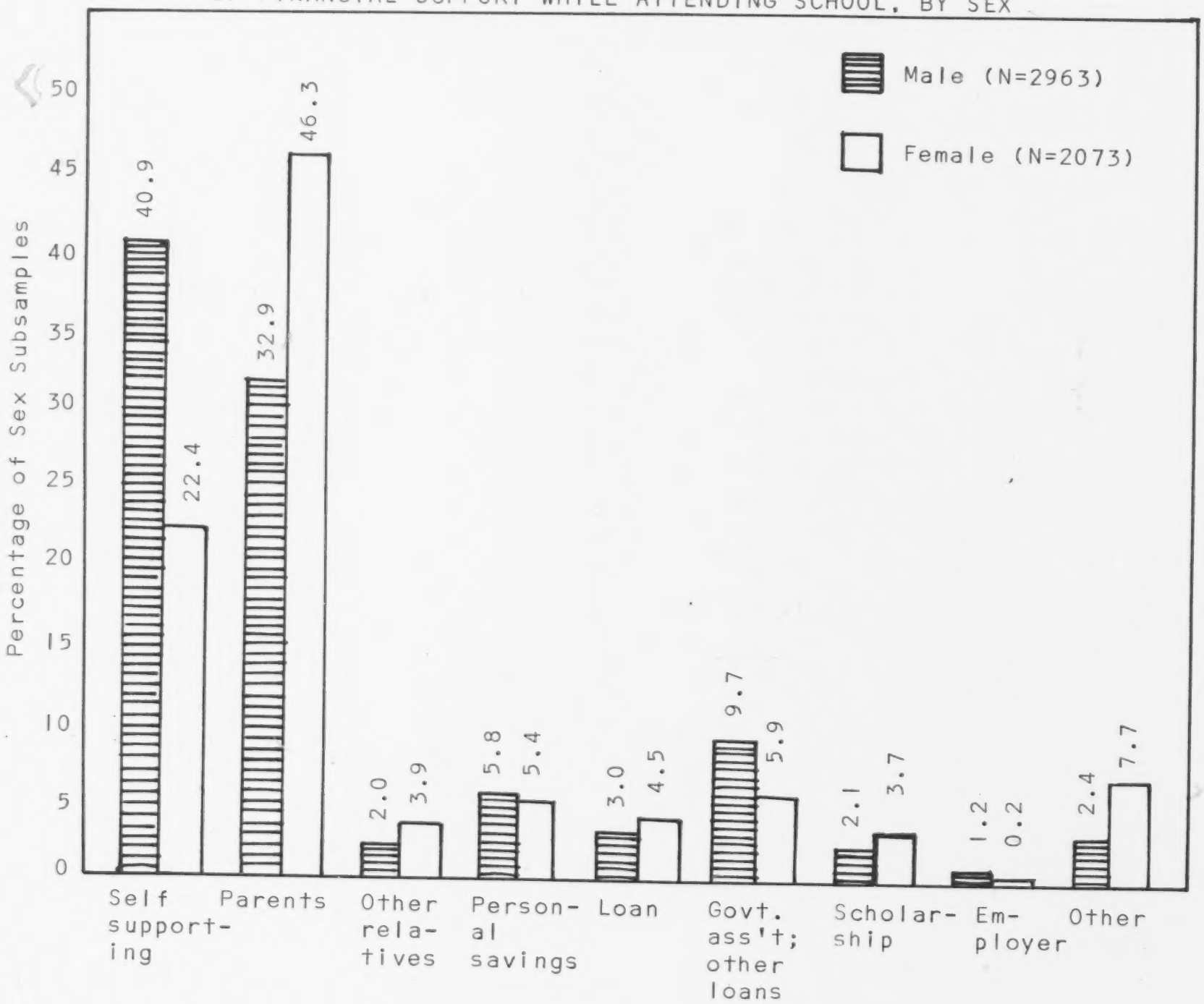

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TABLE 7.9

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO MAIN SOURCE OF FINANCIAL SUPPORT DURING COLLEGE, BY RACE

Main Source of Financial Support	Race		
	White	Black	Oriental
Self-supporting	33.3	32.8	32.5
Parents	38.7	29.7	53.0
Other Relatives	2.6	5.8	1.2
Personal savings	5.9	3.9	1.2
Loan	3.5	5.4	0.0
Government assistance, other than loans	8.0	9.7	7.2
Scholarship	2.7	3.9	1.2
Employer paying for course	0.8	0.8	1.2
Other	4.4	8.1	2.4
TOTAL (Number)	99.9 (4624)	100.1 (259)	99.9 (83)

junior college vocational-technical students. Financing patterns vary according to race. Whereas, roughly the same fraction of each racial group (one-third) indicate they are self-supporting, major variations characterize the interracial group comparisons with reference to the percentages identifying parents as major support sources.

It is logical to predict that a greater proportion of lower socioeconomic respondents are self-supporting while attending school, while a larger percentage of individuals with relatively higher socioeconomic origins are more dependent for assistance upon their parents. Table 7.10 contains data in support of these predictions.

TABLE 7.10

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO MAIN SOURCE OF FINANCIAL SUPPORT DURING COLLEGE, BY SOCIOECONOMIC LEVEL

Main Source of Financial Support	Socioeconomic Level		
	I & II	III & IV	V & VI
Self-supporting	27.0	33.6	37.9
Parents	53.7	41.1	32.0
Other relatives	1.8	2.6	2.4
Personal savings	3.3	5.6	5.7
Loan	3.3	4.1	3.8
Government assistance, other than loans	6.2	5.9	10.5
Scholarship	.7	2.9	3.1
Employer paying for course	.4	1.1	.8
Other	3.6	3.1	3.7
TOTAL (Number)	100.0 (274)	100.0 (1954)	99.9 (1311)

Table 7.10 also discloses a greater portion of the lower socioeconomic respondents are recipients of governmental assistance than are students from the two higher socioeconomic groups. It should be noted, however, that the number of respondents receiving such assistance is quite small. In some measure, this finding may reflect the more basic national prejudice against occupational education.

The low percentages of students receiving scholarships and loans are also in accord with what was expected. In the main, these kinds of financial assistance are reserved for students beyond the two-year college level.

These findings on financial support patterns, by the respondent's socioeconomic level, contribute to furthering interpretations of Table 7.9. It appears the reason why significantly fewer blacks than whites or orientals cited parental assistance as the main support source is more a matter of "socioeconomic background" than "race." Approximately two-thirds of the black students come from the lowest of three socioeconomic groups. It is more difficult to explain why more than one-half of the orientals select parents as the main source of support, even though about the same fraction belong to the lowest socioeconomic category. It is posited that this finding has a subcultural explanation. The value system of orientals as a group stresses familial loyalty and intra-familial dependency. Parental assistance with reference to facilitating the educational achievement of offspring is compatible to this value system.

EMPLOYMENT WHILE ATTENDING COLLEGE

It is generally assumed that large numbers of junior college students work at least part-time while attending college (Reynolds, 1965: 47). Although one study (Baird, *et al.*, 1969) reported as many as 83 percent of over 4,000 two-year college graduates worked at least part-time while attending college, other investigations (Medsker and Trent, 1965; Richards, *et al.*, 1966) indicated that between one-half and two-thirds of the students in their samples worked while attending college. The present study also examined the employment patterns of community college students. In this instance, however, the data relate exclusively to vocational-technical students.

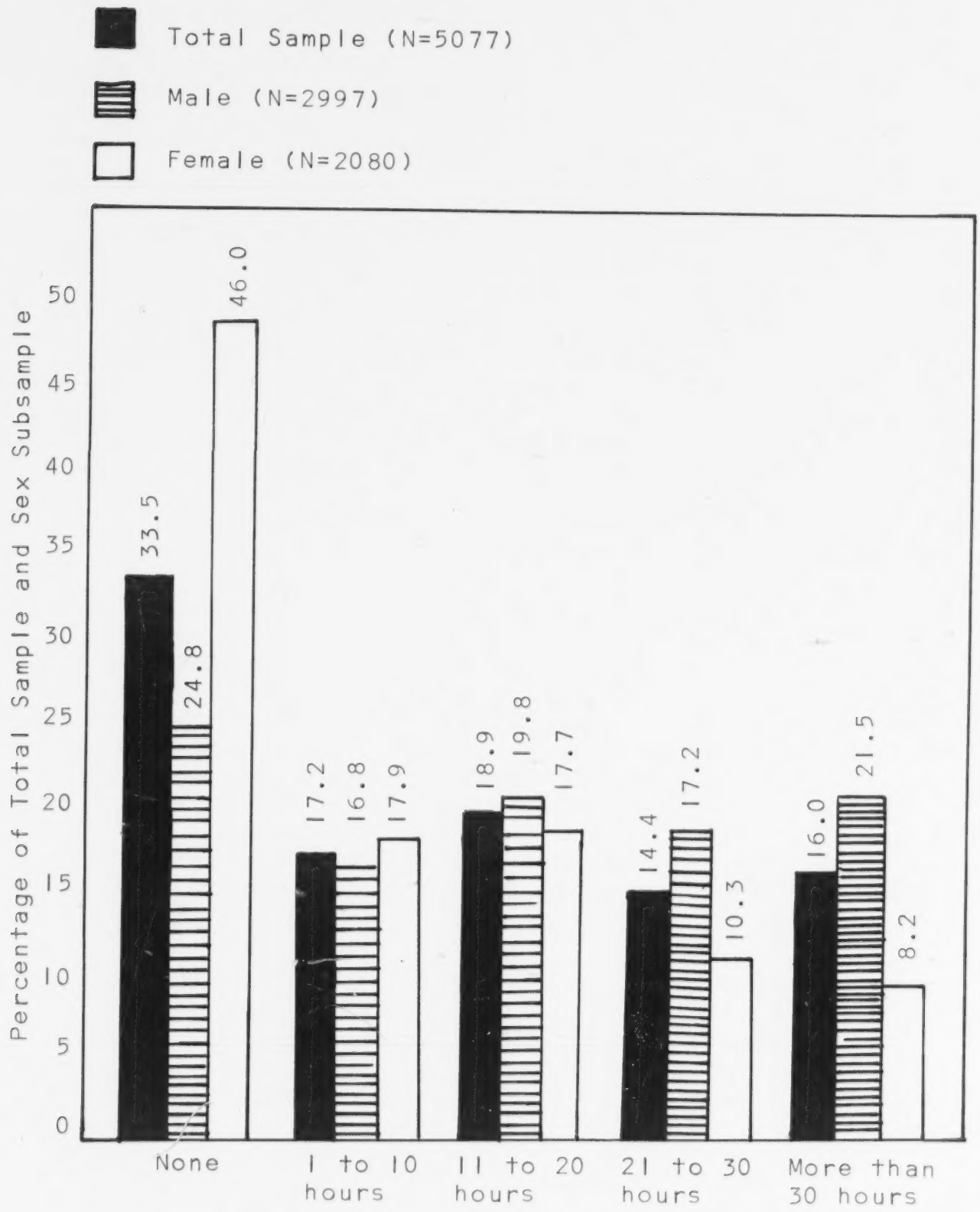
As pictured in Figure VII-5, 66.5 percent of 5,077 respondents are employed at least some of the time outside the home. The fact that nearly one in four of the students work 20 or more hours per week is in part explained by the fairly large number of part-time students composing the sample. At the same time, however, one in three of the employed students work 20 hours or less per week.

Figure VII-5 suggests additional observations. For example, not only do proportionately more men than women report working while attending junior college, but there is also a tendency for the men to work, on the average, more hours per week.

No item is included in the questionnaire which elicited information concerning basic reasons for the employed students to work while attending college. Indirectly, however, it may be possible to derive some insight into this matter. If the primary motivation for a student to also be employed is to make money primarily for college expenses, it is likely that an inverse relationship will exist between socioeconomic background and number

FIGURE VII-5

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO AVERAGE NUMBER OF HOURS WORKED PER WEEK, BY TOTAL SAMPLE AND SEX



of hours employed. This seems logical because higher socioeconomic families have a value orientation and the wherewithal which are consistent with assisting offspring in the financing of their higher education. On the other hand, if the primary motivation behind a student working involves factors other than college-related expenses (e.g., purchase of new car) it is likely that the relationship between the family background and employment variables will not reflect any particular pattern. This position appears warranted because there is no reason to think that employment for noncollege related reasons would be peculiar of one socioeconomic group and not of another. With these two alternative predictions in mind, the relationships between parental household head's occupational group and employment and socioeconomic level and employment can be seen by inspecting Figures VII-6 and VII-7. Of the two alternative explanations presented above, these findings come closer to supporting the second prediction.

This inferential conclusion has some support in a study by D'Amico and Raines (1957). Of the junior college students in their sample who held part-time jobs, about one-half indicated it was not necessary for them to be employed to stay in school.

JOB-PROGRAM RELATIONSHIP

It is considered relevant to explore the job-program of study relationship as defined by the employed students. In general, the greater the relationship, the greater will be the relevancy the students attribute to both experiences. The respondents were asked the following question: "Does your job relate to the program of study you are taking and your future work plans?" A total of 3,555 employed students provided answers to this question. Of this group, 43.3 percent maintain their jobs are related to their programs of study, and 57.7 percent say this is not the case. When categorized as to sex, 38.6 percent of the males (N=2334) and 52.4 percent of the females (N=1221) say a job-program-relationship exists.

Controlling for the respondent's service area, the perceived job-program relationships are pictured in Figure VII-8. For the most part, variations characterize the comparisons. The percentage of respondents who see a relationship between study and work range from 35.5 percent (trade and industry) to 59.8 percent (vocational agriculture). In each of four service areas (distributive education, health occupations, home economics, and agriculture), more than one-half of the employed students maintain a relationship exists between job and school. In the remaining service areas, less than one-half express such relationships.

FIGURE VII-6

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO AVERAGE NUMBER OF HOURS WORKED PER WEEK, BY HEAD OF HOUSEHOLD'S OCCUPATIONAL GROUP

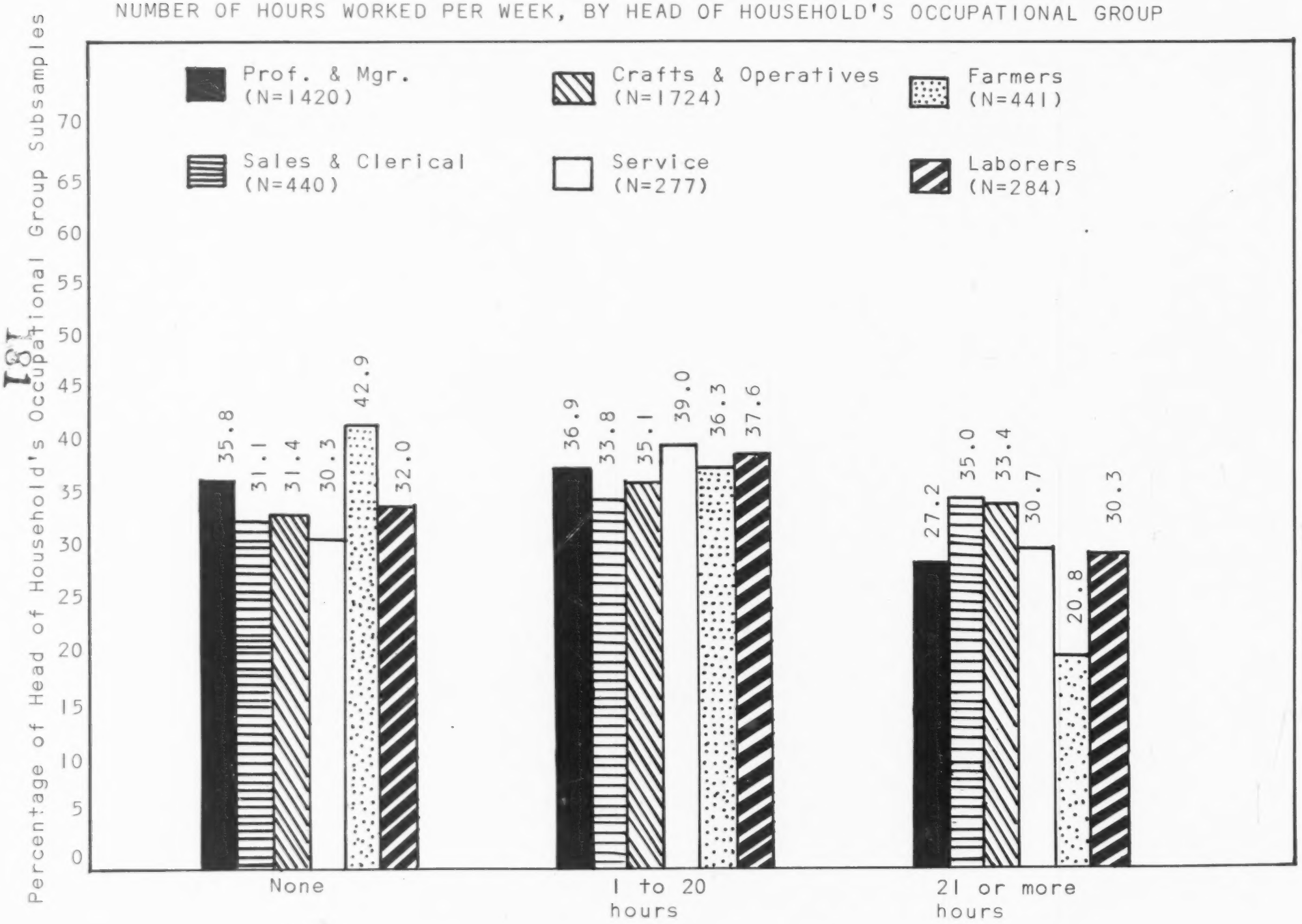


FIGURE VII-7

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO AVERAGE NUMBER OF HOURS WORKED PER WEEK, BY SOCIOECONOMIC LEVEL

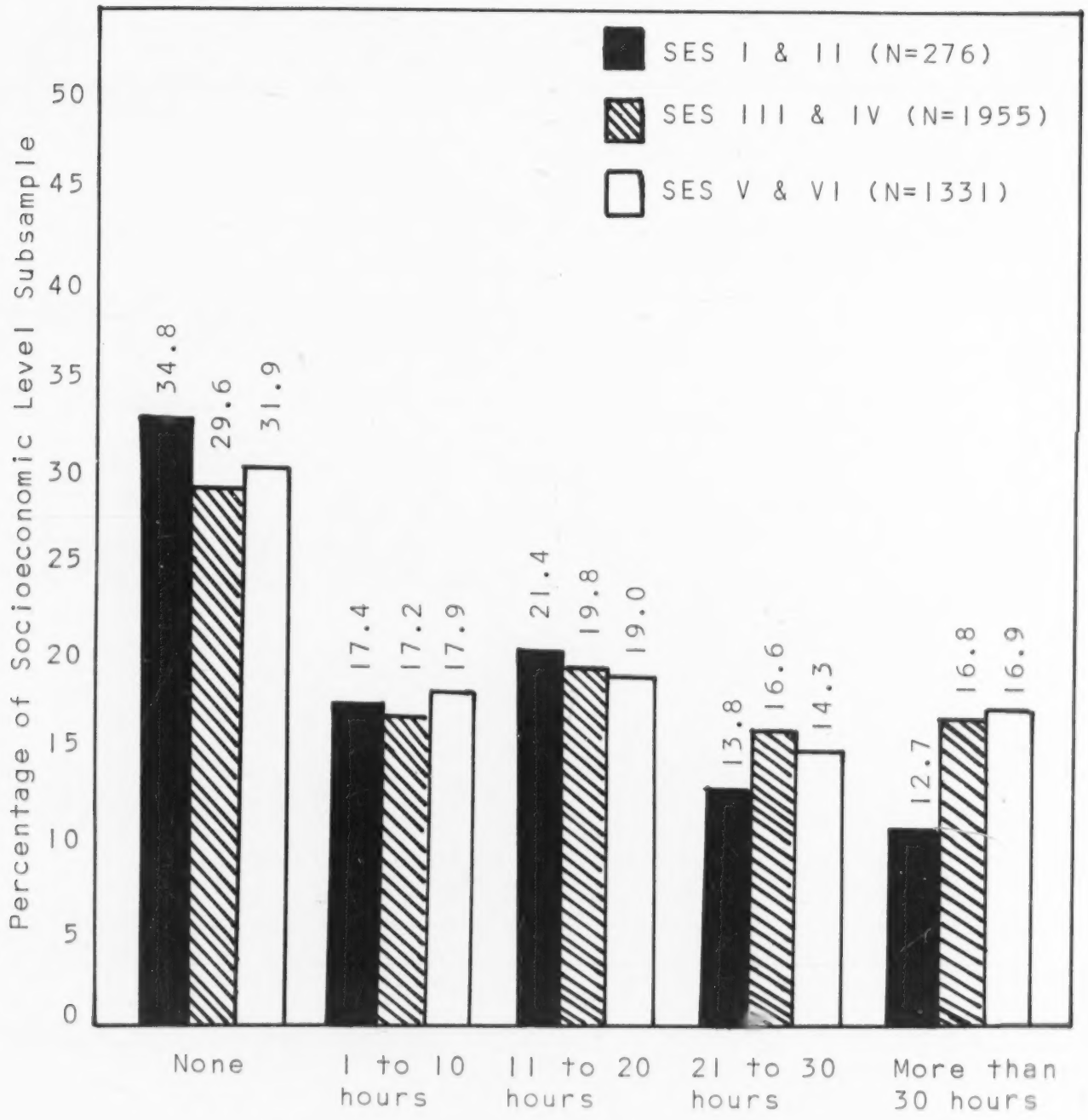
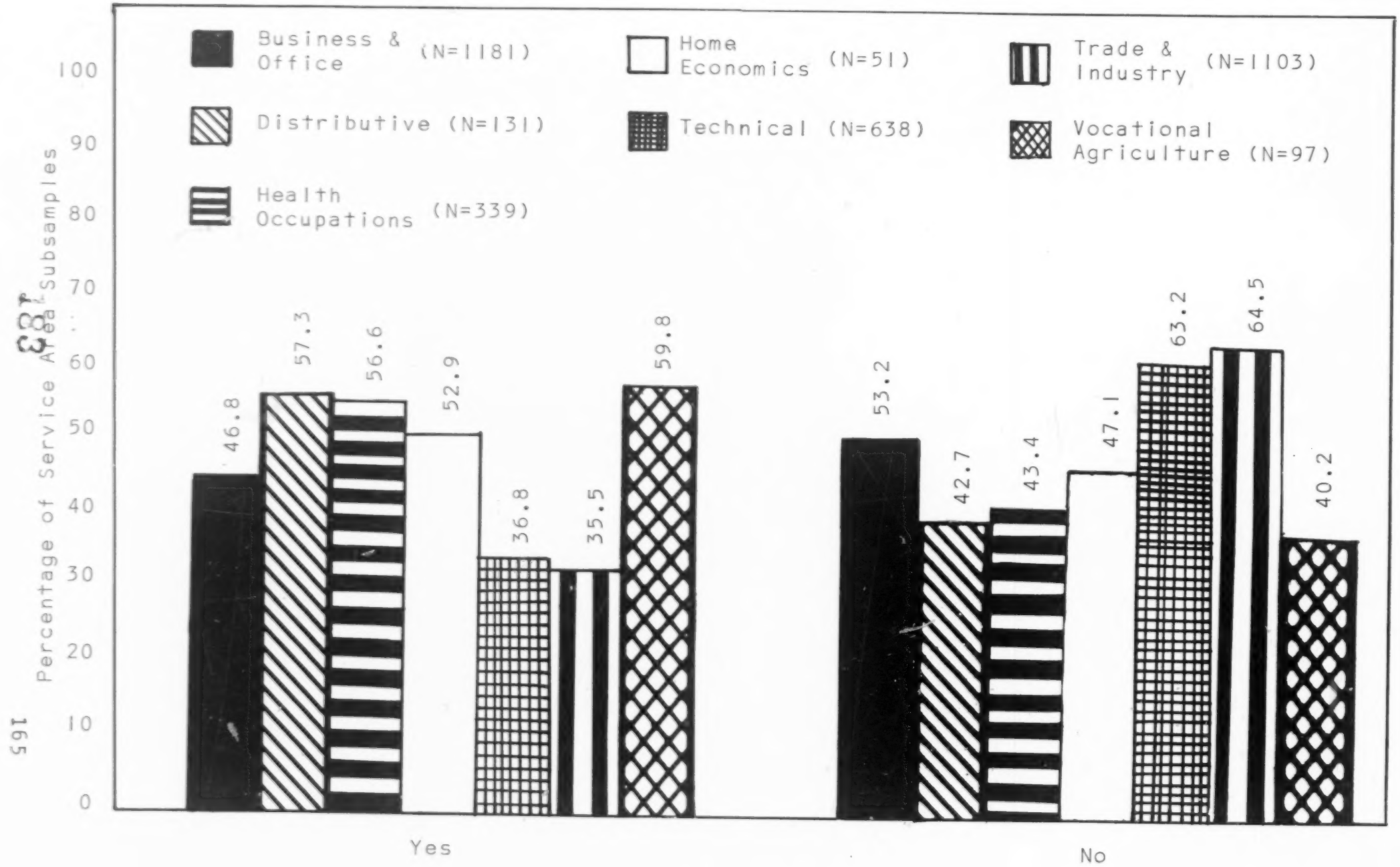


FIGURE VII-8

JUNIOR COLLEGE OCCUPATIONAL STUDENTS DISTRIBUTED AS TO WHETHER OR NOT THEIR WORK IS RELATED TO PROGRAM OF STUDY AND FUTURE WORK PLANS, BY SERVICE AREA



SUMMARY

One area covered in this chapter pertains to education-related experiences of the sample members. About 90 percent of the students are freshmen or sophomores, 11 percent of whom are on a part-time basis. Roughly the same percentage are "unclassified" students. The respondents attend colleges representing a wide range of enrollment sizes. One-third of the students are in schools with 2,500 or more enrollees; one-fifth are in schools of 1,000 or less. Participation in cooperative education programs is characteristic of 22.5 percent of the subjects. Involvement in cooperative programs is proportionately higher for students in health occupations and distributive education than for members of each of the other service areas. Participation rates are also higher for females and blacks. Nine out of 10 occupational students evaluate their training programs as either "very adequate" or "fairly adequate." Certain minor variations in evaluation patterns exist among students according to service area. The training evaluation patterns are quite similar from one geographic region to the next. The overall training evaluations of this study are extremely comparable to those derived from a national sample of two-year college graduates. Apparently, junior college students are quite satisfied with their training.

A second broad area explored is concerned with various aspects of the respondents' present work experiences. Data on the main source of support while attending college indicate that one-third of the students are self-supporting, while about two-fifths of the sample say parents constitute their primary support source. Proportionately more males rely on themselves for support, while a greater percentage of the women are dependent upon parents. Relatively few of the respondents cite federal assistance, scholarships, and loans as main support sources, thus reflecting the fact that two-year students do not compete very well with other higher education students for their share of assistance in these areas. About three out of seven of the employed students see a relationship between their work and program of study. This is more characteristic of females than males. A greater proportion of respondents in vocational agriculture, distributive education, and health occupations claim a relationship exists between their job and study program than is the case of students in the other specialty areas.

VIII. OBSERVATIONS AND CONCLUSIONS

This publication has reported considerable information provided by a national sample of community-junior college occupational students. In general, the study describes the respondents as to personal and background characteristics, experiences, and perceptions. The focus of interpretation of the findings was primarily that of deriving implications for educational planning and development. This final chapter selectively presents a synthesis and summary of the data, with the intent of arriving at conclusions which are particularly relevant and of interest to administrators, teachers, counselors, parents, and students. The foci of the chapter are suggested by its major topic divisions: from high school to junior college; democratization of higher education; Negro involvement; comparisons among occupational service areas; residential proximity and junior college attendance; occupational education and geographical mobility; and study limitations. The initial topic is divided further into several subtopics.

FROM HIGH SCHOOL TO COMMUNITY COLLEGE

At the present time, about 80 percent of the nation's youth enter the labor market without benefit of some form of post-secondary training. It is the opinion of some experts in the post-secondary occupational education area that it is desirable for about one-half of the labor force to have at least two-years of post-high school education (e.g., Harris, 1965). The need for significantly more graduates of post-high occupational programs is strikingly evident. This section identifies several obstacles impinging upon the "flow" of high school graduates into junior college occupational programs. Possible solutions are also suggested. The discussions which follow are centered around these subjects: limited exposure and accessibility, image problems, program coordination, period of occupational choice and curriculum development, and guidance and counseling.

LIMITED EXPOSURE AND ACCESSIBILITY

It has been only within the most recent years that vocational-technical education beyond high school has developed sufficiently to be readily accessible to even a substantial minority of Americans. The public as a whole has had limited exposure to this

educational focus--its entrance requirements, nature of programs, opportunities for graduates, etc.. It is vital that "personal" and "mass" advertising campaigns be instituted to give occupational education greater and broader societal visibility. Parents should be a key target of such campaigns, since they often have major influences on the career decisions of youth. Obviously, the youth themselves, whether it be in the school or non-school situation, (e.g., via religious clubs, street gangs, Girl Scout Troops, or pool hall cliques) must be "reached." Already handicapped with acute shortages in qualified teachers, counselors, and placement workers, high schools and/or junior colleges are not in the position to accomplish this job alone.

For at least two decades, the Employment Service has worked with schools in providing noncollege-oriented youth with testing services, counseling, and placement opportunities. In recent years, the Employment Service has increased its activities in these areas, not only as they pertain to high school graduates, but to the dropouts as well (e.g., Human Resources Development Program). In the opinion of Charles E. Odell (1967: 21),

> . . . the program (Human Resources Development) does not go far enough in reaching the dropout before he or she actually leaves school, nor does it provide sufficient staff and time to prevent the dropout from leaving school by redirecting him toward other kinds of educational and job opportunities which would forestall educational deficiencies that become lifetime roadblocks to vocational progress and success.

As in the case for schools, the U.S. Employment Service and the federal-state employment service system are also limited as to funds and personnel. In the absence of sufficient resources, public and voluntary agencies in education and manpower must pool resources and in a cooperative and coordinated manner "reachout" to where youth groups exist.[1] In addition to making available information and guidance which are salient to maximizing facile status changes, "outreaching" will provide much needed preventive and remedial services to youth.

At the present time, the amount of money invested by the federal government in the nation's universities is considerably greater than that allocated for vocational-technical education. According to the Advisory Council on Vocational Education (1969: 2), the expenditure ratio is $14 to $1 in favor of the universities

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[1]Additional related comments may be found in a subsequent section concerned with the participation of Negroes in vocational education.

and colleges.[2] By the same token, the amount of local and state support tend to be comparatively small. These imbalances exist at a time when roughly 60 percent of our high school youth do not go on to attend a four-year college or university. Considering this fact alone, it is not surprising the majority of our youth leave high school ill-prepared to meet the skill requirements of the labor market.

Major increases in financial support will not only enhance the availability of programs, lessen personnel shortages, etc., but with the accompanying publicity and tangible signification of governmental commitment, a greater national awareness of vocational education will result.

It would be remiss not to mention that community-junior colleges have received major increases in funds during the 1960's (Williams, 1969). Although these institutions have not faired as well as other types of higher education institutions, there are reasons to think the chasm will be alleviated greatly within the next few years (Mensel, 1969).

IMAGE PROBLEMS[3]

There is no doubt that vocational-technical education is experiencing greater acceptability in America (e.g., Grieder, 1968). For the most part, however, this acceptability is apropos for the children of others (Advisory Council on Vocational Education, 1969: 1-2). Most high school students, their parents, and not infrequently, their teachers and other school personnel,

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[2]It may warrant mentioning that the federal government invests " . . . nearly $4 in remedial manpower programs for each $1 it invests in preventive vocational programs" (Advisory Council on Vocational Education, 1969: 3).

[3]An article by Gibboney (1969: 30) identified some of the primary factors responsible for the "orphan status of vocational education in our society and in our schools." Briefly, these include: (1) work of craftsman undervalued because of our Greek heritage; (2) tendency for dualistic orientations to prevail--the abstract is rated higher than the concrete; (3) narrow, practical orientation of vocational education combined with its isolation, precluded vocational education from being a part of the educational mainstream; (4) controlling influence of the upper socioeconomic classes on educational policy whereby academic (college preparatory) education was predominant, resulting in the quasi-isolation of vocational education; and (5) basic lack of commitment by educational generalist and lay policy-maker to broader societal problems requiring practical solutions.

ascribe secondary valuation to post-high school occupational training, compared to a baccalaureate degree-oriented curriculum. To a major extent, this may be attributed to the fact that occupational education prepares a person for subprofessional employment. Traditionally, these jobs have been less prestigious and not as financially rewarding as the occupations normally available to graduates of four-year institutions. The prestige assigned to one's job occupies a position of centrality in the American society--a society that epitomizes a culture of work (Anderson, 1964). In addition, it is likely

> . . . as society becomes more complex, being characterized by greater heterogeneity and mobility of population, increased secondary interpersonal contacts, urbanization, bureaucratization, and the like, . . . occupational identification will become progressively more significant in displacing other status fixing attributes as ancestry, religious office, political affiliation, and personal character (Garbin and Bates, 1961: 131).

As a result, youth are often pressured to pursue baccalaureate programs. This pressure has been exerted even when the youth may not be motivated, not have the appropriate capacity or ability, and lack the finances to commit four years in pursuit of a B.A. or B.S. Degree. Furthermore, there are presently some indications that a baccalaureate degree no longer insures a person of a highly prestigious and financially remunerative job. Significantly, some of the most crucial labor shortages require skills frequently taught at post-secondary occupational institutions. Although the prestige of these occupations have tended to remain relatively stable through time (Hodge, *et al.*, 1964), other rewards (money, fringe benefits, better working conditions) have increased. Any effort to educate the public as to subprofessional training and job opportunities must stress these changes.

Another source of image tarnishment stems from the general societal evaluation of the quality of vocational-technical students. Regardless of institutional level, a stereotype exists whereby occupational students are considered inferior by nature to students enrolled in other programs. Since it is also generally believed that junior college students are inferior to four-year students (Reynolds, 1965: 45-47), this condition is aggravated on the junior college level. It is true that vocational programs have been used as a refuge for the "lower ability" students (e.g., Grieder, 1968). This is obviously the case on the junior college level. In an effort to restrict enrollment, many four-year colleges have increased admission requirements, forcing numerous "low ability" students to enroll in junior colleges. However, countless studies, including the present research (see Table 8.1), should eradicate the myth which ascribes "inferiority" to junior college students as a whole.

TABLE 8.1

PERCENTAGE COMPARISON OF HIGH SCHOOL GRADES OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN THE PRESENT STUDY WITH GRADES OF STUDENT GROUPS IN THE ASTIN, PANOS, AND CREAGER STUDY: A SELECTED SUMMARY

	Present Study	Astin, Panos, and Creager Study*		
		Entering Public 2-Year College Students	Entering Public 4-Year College Students	Entering Public University Students
Mostly A's, or mostly A's and B's	15.8	10.2	29.4	39.8
Mostly B's, or mostly B's and C's	50.2	58.2	57.0	51.7
Mostly C's	24.3	29.6	12.9	8.0
Mostly C's and mostly D's or Below	9.7	1.9	.7	.4

*(Astin, Panos, and Creager, 1967)

As Table 8.1 indicates, over two-thirds of the national sample reported "above average" grades as high school students. In fact, about one out of six reported receiving mostly "A's" or mostly "A's" and "B's". In terms of aggregate analysis, the mean self-reported grades of the vocational junior college students is much less than that for students in four-year colleges and universities, and slightly lower than the mean of junior college students in general.[4] However, to quote from Reynolds (1965: 47),

> Junior college students with the greatest ability compare favorably with the most able students in four-year colleges. Differences usually appear when the less able of the two groups are compared. The less able in the junior college drop substantially below the less able in the four-year college. It is quite natural to expect that the computation of a mean or median for the junior college student will be lower than that for students in four-year colleges.

In the final analysis, it is probably going to be of more value to think of students as having different kinds of abilities rather than a gradation of ability (Guilford, 1959). Thought and action should be given to fostering this concept of ability in the homes and schools of this nation.

PROGRAM COORDINATION

Various findings of the present research project have implications for program articulation between high school and post-secondary institutions. It is to be recalled that a majority of the sample of junior college occupational students had enrolled in a limited number of high school occupational courses, directly related to their present service-area-major.[5] Of further importance, only about one-half of the respondents (N=5,103) "came directly" to the junior college in which they were students at the time of this survey. Approximately 30 percent of the total sample either attended another college or were employed for a period of time following high school graduation. Relative to this group, these speculations are tendered: (1) most of the "transfer" students were unsuccessful in their initial quest for a higher education and the community-junior college was providing

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[4] Some attrition of "lower ability" students had probably occurred in the present study's sample.

[5] Information was presented in Chapter IV indicating the lack of program offerings did not totally explain why a majority of students in each service area had taken few, if any, high school occupational courses.

them with a "second chance"; and (2) most of the "employed" respondents resumed their education, frequently in a part-time capacity, after recognizing its relevance and/or it became economically feasible. On the whole, the above data indicate the students did not attribute much importance to securing an occupational education following high school and post-high school occupational training does not appear to be a continuation of training initiated in high school.

It is our position that high school vocational programs should increasingly take the form of training for advanced post-secondary occupational education; however, high schools should also continue preparing individuals with entry-level skills. Both training perspectives are compatible with the projected skill requirements of the labor market. Furthermore, post-high school programs designed as continuations of high school programs must be extremely flexible. At the same time, the rapidly changing occupational structure makes it essential that the " . . . vocational curricula be designed to provide a useful basis for occupational versatility" (Morrison, 1969: 12-14).

PERIOD OF OCCUPATIONAL CHOICE AND CURRICULUM DEVELOPMENT

Regardless of future education plans, certain advantages accrue to a person if he has reached an occupational decision at least prior to entering the upper division of high school, providing such formulation is compatible with subsequent abilities, interests, values, etc. For example, it would be possible for academic program and course selection to be more consistent with future occupational-educational objectives. It is also likely a relatively early occupational commitment will give the student a greater sense of identity. As a consequence, occupational commitment will provide both greater unity and meaning to the student's educational experience. It has been shown that students who are career oriented are more likely to have the highest persistence and graduation rates (Iffert, 1958).

Early occupational planning is especially important for future occupational students of two-year colleges. Compared to four-year college students, they do not have a fairly extended period of time while enrolled in a post-high school institution, during which it is not necessary to declare a major. Although as comparative data presented in this report suggest, there is a tendency for occupational program enrollees to make occupational decisions earlier than baccalaureate-degree oriented students, it must be stressed that about six out of 10 of the national sample reported making occupational choices during or following their high school senior years. As Caplow (1954: 228) wrote: "In general, the time at which (occupational) commitments are made will

depend upon cultural norms, rather than upon the strength of individual motivations." It is especially difficult to lower the age level by which one is culturally-expected to have made his occupational choice. This is particularly the case when it is realized that during the past few decades there has been a tendency for the age at which such decisions are made to actually increase. However, certain strategies will be recommended which may result in individuals being more amenable to earlier career decisions, based upon more rational decision-making in the area of career choices.

Beginning with kindergarten the "world of work" should represent a greater portion of the educational experience of young people. A total informational-experiential and unified system of vocational-technical education must be developed and incorporated into the educational systems of this country. In addition to occupational-skill training, at various levels of specificity, units of study should include: the requirements, roles, rewards, and punishments concerning occupations representing the entire occupational spectrum; social-cultural change and implications for the occupational structure; demands and requirements of the labor market; significance of work to the individual, work organization, and society; meaning and ideology of work; the career process;[6] problems of worker adjustment; and coping behavior. In the words of Venn (1968: 114): "It is no longer possible--nor even desirable--to separate education, especially education for the world of work, from the basic problem of preparation for a work life."

The emphasis of this recommendation is similar to that of Kaufman and Lewis (1969), who wrote:

> The system would extend from the elementary school through post-high school. The curricula would be of a spiral nature increasing in complexity and specificity at the higher level. At the high school level the emphasis would be on broad rather than specific training. While acquiring entry-level job skills, students would also be prepared for post-secondary education (Kaufman and Lewis, 1969: 14).

Additionally, in agreement with the Advisory Council on Vocational Education (1968: 75), the basic orientation of the curriculum is as follows:

> Vocational preparation should be used to make general education concrete and understandable; general education should point up the vocational implications of all

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[6]For a discussion of this, see a paper by Ivey and Morrill (1968).

education. Curriculum materials should be prepared for both general and vocational education to emphasize these relationships.

In addition to making education more relevant, reducing attrition rates in the process, and better preparing youth to adjust to the realities of a work-oriented world, the strategies identified above should enable career decisions to be made on a more rational basis. As such, individuals will be in the position to consider the requirements, rewards and duties of various occupational alternatives, and to balance these considerations with what they perceive as their capacities, interests, and values. Agreeing with Slocum (1966: 209), "Rationality in occupational choice is a desirable objective both from the standpoint of individual decision-makers and of the society as a whole."

GUIDANCE AND COUNSELING

Discussions pertaining to vocational guidance have already been made. However, the availability of additional data from the national survey, relative to the movement of students from high school to junior college, warrant the inclusion of a separate section on this subject matter.

Summary data in Table 8.2 reveal that the personnel in the high schools from which the community college students graduated had relatively little impact upon certain of their career decisions. It was not surprising that compared to such factors as "low cost," "nearness of college," and "program offered," insignificant proportions of respondents identified school personnel as constituting either the most important, second most important, or third most important reasons for attending their particular college. The data on "source from whom learned about program of study" and "most important influence in choice of study program" did reveal some surprises. Most striking are the results on the relatively limited number of respondents who maintained they were influenced by the guidance counselor regarding program source and program selection. The small percentage of students who said the vocational education teacher was the most important influence in choice of program is also noteworthy. The factors responsible for the minimal influence of high school personnel on the post-high career decisions of the students were not examined in the study. Previously published studies (Barry and Wolf, 1962; Kaufman, *et al.*, 1967; Campbell, 1966; Venn, 1964) indicate the following are likely to be among the most important impediments: four-year college or university bias; excessive student-counselor ratios;[7] lack

[7]The Office of Education (cited in Raines, 1965) estimated that 3,000 counselors are needed in junior colleges and technical institutes, if the desired ratio of one counselor to every 300 students is to exist.

TABLE 8.2

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY NATURE OF INFLUENCE OF HIGH SCHOOL PERSONNEL: A SELECTED SUMMARY

Nature of Influence	High School Personnel			Total Sample	Table or Figure**
	Vocational Education Teacher	Guidance Counselor	Other Teacher		
Most important reason for attending present college	.4	2.1	*	5105	VI-9
Second most important reason for attending present college	.5	2.8	*	5107	--
Third most important reason for attending present college	1.1	3.3	*	5084	--
Source from whom learned about program of study	20.0	7.1	4.0	5057	6.10
Most important influence in choice of program of study	9.3	5.2	3.2		VI-16

*Not listed as a possible response.
**Based on specified table or figure.

of coordination and cooperation among school personnel; limited services and lack of occupational information. Each high school[8] must attempt to alleviate those factors negatively affecting the efficacy of its vocational guidance program.

In addition, the need for vocational guidance and counseling will be much greater than at any time previously.

> As this happens, it seems clear that it will be necessary to find new techniques and new methods . . . . Vocational guidance is by nature a more complex task than other kinds of guidance in the school setting because the number and variety of options is larger. Consequently, there is more educational and vocational information to relate to an individual's characteristics, needs, and aspirations . . . . Even with the introduction of new technology, it surely will become necessary to follow Campbell's (1968) suggestion and to introduce system design and analysis procedures to the total guidance problem (Morrison, 1969: 14-15).

COMMUNITY COLLEGES: THEIR DEMOCRATIZATION OF HIGHER EDUCATION

According to a recent issue of *The Research Reporter* (Cross, 1969),

> Two social forces stand out above all others in creating the distinctive identity of the community colleges: 1) the demand of an increasingly equalitarian

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[8]Obviously neither the significance, nor the problems, associated with guidance and counseling are limited to the high school level. An issue of the *Junior College Review* (Roueche, September, 1968a) is devoted to an examination of junior college guidance and counseling. Roueche concludes his review of pertinent documents with the following words:

> At the present time, it cannot be maintained that these services (guidance and counseling) have been even remotely successful in (1) reducing student attrition, (2) providing adequate career information, or (3) placing students in programs where they have a good chance to succeed. Evaluation of these programs is virtually nonexistant: their effects must still be demonstrated.

For a blistering critique of counseling on the junior college level, refer to an article by Collings (1965).

society for the democratization of higher education and 2) the need of a technological society for a better educated citizenry.

A variety of data have been collected in this survey which make it possible to ascertain if junior colleges can be viewed as an equalizing force in higher education.

Previous research[9] shows consistently that junior college students are more representative of the population as a whole, rather than being skewed toward the middle and upper socioeconomic levels as is the case of student enrollees of four-year colleges and universities. Table 8.3 summarizes background data relevant to determining whether or not this statement is also characteristic of the occupational students on which this research is based.

Table 8.3 reports that in four of five background variables, the respondents are overrepresented in the "middle" category, and least represented in the "high" category. The only exception to this pattern is "occupational background." In general, these findings suggest the democratization of higher education is occurring. This conclusion is further supported by the discussions which follow.

In the words of Cross (1968: 15), ". . . research findings are virtually unanimous in demonstrating a rank ordering of types of colleges on the basis of student socioeconomic background." From high to low, the rank order is generally as follows: private university, private four-year college, denominational four-year, public university, private two-year, public four-year and public two-year. In this monograph, the distributions of the junior college occupational students as to parental education were compared with the results of an earlier study (Astin, *et al.*, 1967) in which similar information was available concerning students enrolled in four-year colleges, universities, two-year private colleges and two-year public colleges (see Table 8.4).

In comparison to other student types, smaller percentages of the vocational-technical students had fathers and mothers who were college graduates; larger percentages of these students had parents who did not graduate from high school.

It is particularly significant to stress that the parents of the public, community college occupational students had less education, as a group, than did the two-year public college students in the study by Astin, *et al.* The students in the Astin, *et al.* research were not classified as to program of study. In general,

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[9]For brief summaries of these studies, see Volume IV of *The Research Reporter* (Cross, 1969: 2-3) and (Cross, 1968: 15-18).

TABLE 8.3

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS, BY THREE LEVELS OF VARIOUS MEASURES OF SOCIOECONOMIC BACKGROUND: A SELECTED SUMMARY

Category	Occupational Background*	Parental Education**		Income Background***	SES****
		Father	Mother		
Upper	31	12	10	27	8
Middle	47	45	55	39	55
Lower	22	43	35	34	37
TOTAL	100	100	100	100	100
(Number)	(4462)	(5085)	(5098)	(3999)	(3554)

*Upper = professional and technical; managers, officials and proprietors
Middle = sales; clerical; craftsmen and foremen, farmers
Lower = operatives; service; laborers (Based on Figure V-1)

**Upper = graduated from college or university
Middle = graduated from high school, or some college, but didn't graduate
Lower = did not graduate from high school (Based on Figure V-3)

***Upper = $11,000 or more
Middle = $7,000 to $10,999
Lower = $6,999 or less (Based on Table 5.4)

****Upper = SES I & II
Middle = SES III & IV
Lower = SES V & VI (Based on Figure V-6)

TABLE 8.4

PERCENTAGE COMPARISON OF PARENTAL EDUCATION OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS IN THE PRESENT STUDY WITH PARENTAL EDUCATION OF STUDENT GROUPS IN THE ASTIN, PANOS, AND CREAGER STUDY*: A SELECTED SUMMARY

Type of Student	Father's Education		Mother's Education	
	College Graduate	Non-High School Graduate	College Graduate	Non-High School Graduate
University*	33	20	21	16
4-Year College*	29	24	20	18
2-Year Private College*	22	30	15	23
2-Year Public College*	15	34	11	28
Community College Vocational-technical**	11	43	10	35

*(Astin, Panos, and Creager, 1967)
**Present Study

however, three times as many transfer students than vocational students are enrolled in the public community colleges of the United States.[10] Hence, it may be warranted to infer that occupational students in public junior colleges come from more limited educational background than do transfer students enrolled in similar-type institutions. This is consistent with the findings of at least one other study (cited by Cross, 1970).

[10] In one study (cited by Cross, 1970) about 50 percent of the freshmen registered in college-parallel programs, 32 percent in vocational-technical programs or courses, and 20 percent in general and developmental education and unspecified curricula.

POST-SECONDARY VOCATIONAL EDUCATION AND THE NEGRO

The community college has been viewed as " . . . the main instrument of educational opportunity for Negro youth" (Havighurst, 1967: 246). A similar opinion was espoused by Robert H. Finch (1969: 12):

> For black Americans, the public community college has the potential for becoming the most promising single avenue of higher education. The reasons are obvious: These are the accessible institutions--geographically, financially, academically.

The following quotation identifies a variety of factors which contribute to making public two-year institutions more accessible to students, regardless of color.

> . . . its (community college) 'open-door' policy, . . . has given vast numbers of students the opportunity of a lifetime--the opportunity to embark on a college career that might have been denied them through other college channels. This opportunity has been provided to a wide range of students: those who cannot afford to pay tuition at other colleges . . . in the city; those whose poor high school records will not permit them to enter other colleges; those who work full-time and can attend college only at night; . . . those who have been dropped from other colleges and need another chance to prove themselves; those who cannot decide whether or not they want to go to college; those who need a transition between home and going away to college (Kalk, 1961).

Whether or not blacks are taking advantage of these purported opportunities is difficult to determine. Existant data are fragmentary and findings of the present research must be accepted with caution, because of the possibility of sampling biases.

A nationwide study briefly summarized in *School and Society* (October, 1969: 347), indicates that 10 percent or more of the student enrollments at 50 of 100 junior colleges were blacks. Negro students numbered 25 percent or more at 20 of the colleges.

The community college has been considered second only to former Negro institutions in the South in terms of relative "openness" to blacks (Bard, 1969). Finch (1969: 12) indicated that in most large American cities more blacks study at public community colleges than at all nearby institutions. Notwithstanding, if the cited figure of "over 50,000" (Bard, 1969: 21) accurately constitutes the number of Negro, junior college enrollees, their

proportionate representation is much less than that of white students.

The present survey also indicates blacks are underrepresented in the national sample of junior college vocational-technical students. This is consistent with census data on the participation of blacks in higher education. The proportion of blacks attending college is considerably lower than that of whites for every age level, extending from the 16 to 17 years category, to the 30 to 34 years category. Slightly more than nine percent of the whites, compared to 3.7 percent of the blacks, in the 16 through 34 years age range were in college as of October, 1969 (U.S. Bureau of the Census, 1970: 8-9).

The above discussions justify quoting a statement by Knoell (1969a: 24):

> . . . the conclusion is clear that the community college can and must play an even greater role in attracting minority-group students to higher education if parity in both numbers and educational opportunity is to be achieved.

Recruitment becomes inconsequential if the attrition rate is high. Furthermore, in reference to black students, Bard (1969: 21) wrote: " . . . the numbers who succeed are not large enough. In fact, the new hope accompanied by failure makes for even more serious problems for the future." For that matter, irrespective of skin color, the attrition rates of junior college students have been shown repeatedly to be extremely high (Roueche, 1968). Knoell (cited in *School and Society*, 1969) has estimated that one-half or more of beginning college students in many urban areas should have some type of remedial program, prior to initiating their regular transfer or occupational programs. She further indicated that about 20 percent of the students are hard core disadvantaged who require more than mere remedial courses.

An examination of data recently made available by the U.S. Department of Labor (1970) underscores the relevance of a greater number of blacks enrolling in post-high school occupational training programs. An overall teenage unemployment rate of more than 12 percent existed for each of the past 10 years; the rate for nonwhites fluctuated in the 24 to 30 percent range. There is a pressing need to narrow the education gap between blacks and whites at every level. In particular, strategies must be developed and implemented to encourage and enable young blacks to pursue occupational education beyond the high school.

Many potential solutions for promoting the recruiting of additional blacks were identified earlier.[11] We do wish to recall again the single need which blacks and others have for information relative to opportunities in this area. According to Hamlin (1968):

> Currently there is desperate need for bringing to Negroes information about the new occupational opportunities that are opening to them, wherever they may be in the country, and the education and training required to qualify for these occupations. It has been found that large numbers of Negroes are not only unacquainted with these opportunities but are timid about attempting to qualify for them and reluctant to enter the predominantly white schools they would have to attend to qualify.

Teachers, administrative officials, and student personnel officers should also be advised that frequently junior colleges have procedures--deadlines, fees, forms, etc.--which expedite the functioning of the bureaucracy, but serve as barriers to greater student accessibility. In reference to this problem, Knoell (1968: 11) concluded:

> Pressures are increasing to 'tighten' procedures, while avoiding selective admissions and increased tuition and fees. As tightening occurs accessibility dwindles for the disadvantaged for the very reasons which make them high risks--postponement of decision-making, failure to meet deadlines and keep appointments, uncertain motivation, and a certain resentment toward the establishment which keeps them in a state of disadvantage.

Several other specific recommendations with the potential to promote greater black participation in occupational education beyond the high school were made following the 1969 Washington Conference on the Urban Community College (Bard, 1969). These include the following: need for actively recruiting blacks from the inner city; need to build community colleges in close proximity to the poor; need to examine closely factors relating to attrition; and need to review and revise occupational programs to make certain they constitute a part of career ladders so that youth will not view them as leading to "mobility blockage."[12]

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[11] These suggestions were made with reference to the transition of youth from high school to junior college in general; they would also apply in the case of Negroes.

[12] The final suggestion is especially important because many students from minority and/or underprivileged families are not certain that an occupational education will facilitate their movement up the social and economic ladder (Gleazer, 1967b).

A general recommendation was made at the National Conference on Post-Secondary Vocational-Technical Education (Garbin, 1969). Briefly, basic to this recommendation is the development of new and multifunctional organizations, designated as clearinghouses, concerned with the collection, classification, and distribution of information, as well as people. Several agencies would pool resources in a manner to more effectively enhance the recruitment, retention, placement, and follow-up of vocational students.

INTER-OCCUPATIONAL SERVICE AREAS AND STUDENT VARIABILITY

It has been long recognized that students enrolled in public community colleges are quite diverse as to social and economic background, interests, abilities and aspirations. This diversity stems partially from the multiplicity of functions performed by these educational institutions, which include preparing students for transfer to four-year colleges and universities, preparing individuals for immediate employment following a period of occupational training, and providing continuing education for adults, whether it be in the form of general education or retraining for new job skills. The fact that public junior colleges have non-selective admission and low cost policies also contributes to the variant nature of their student clientele.

Basically, the conclusion that community college students have diverse backgrounds has resulted from the analysis of data wherein a minimal effort was made to control for the study program of the respondent. In many studies the findings apply to junior college students as a whole. No attempt was even made to present the results according to broad program areas (e.g., occupational, transfer or college-parallel). The question arose as to whether or not a basic pattern of dissimilarity also characterized intra-student subpopulations comparisons. As such, a principle concern of the present research was to compare selected personal and social characteristics of the junior college occupational students, classified as to vocational-technical service areas.

Table 8.5 summarizes selected descriptive data on the respondents--structural characteristics, social-psychological factors, educational background--according to the service area in which the student was enrolled. These data are only illustrative, rather than exhaustive. For complete information, the reader should consult the original tables and figures, identified in the extreme right column of Table 8.5.

Although certain specific characteristics (i.e., respondents who considered their success chances to be "somewhat limited" or "not much chance") are quite uniformly distributed across the service areas, this is the exception rather than the rule. The

TABLE 8.5

PERCENTAGE OF JUNIOR COLLEGE OCCUPATIONAL STUDENTS CLASSIFIED ACCORDING TO PERSONAL AND SOCIAL CHARACTERISTICS, BY SERVICE AREA: A SELECTED SUMMARY

	Service Area							
	Business and Office	Distributive Education	Health Occupations	Home Economics	Technical Education	Trade and Industry	Vocational Agriculture	Table or Figure
STRUCTURAL FACTORS								
Sex (female)	62	36	92	87	7	9	29	3.2
Age (21 yrs. or more)	23	19	50	23	28	30	21	3.6
Marital status (Married/presently or formerly)	15	11	43	12	15	20	13	3.13
SOCIAL-PSYCHOLOGICAL FACTORS								
Self-esteem level (low)	10	6	7	5	8	8	12	3.17
Success orientation (not very important or very unimportant)	6	4	6	11	7	7	9	3.19
Success chances (somewhat limited or not much chance)	6	6	5	6	5	6	4	3.20

Continued

TABLE 8.5 cont'd.

EDUCATIONAL BACKGROUND AND EXPERIENCES								
High school grades (mostly C's and D's, or mostly D's and F's	8	11	3	2	12	14	7	4.2
Number of semesters of related high school courses (none)	15	63	77	32	27	37	66	4.3
Participation in high school extracurricular activities (below average)	28	30	23	23	37	35	37	IV-4
SOCIOECONOMIC BACKGROUND								
Father's education (below high school graduate)	40	42	49	24	41	48	37	
Mother's education (below high school graduate)	34	33	42	15	31	36	31	
Head of household's income (below $5,000)	11	11	16	8	9	13	12	
Socioeconomic status level (V and VI)	33	38	40	22	37	43	35	
COMMUNITY BACKGROUND								
Size of community where spend most of life (10,000 or less)	36	31	38	40	46	44	69	V-9

striking conclusion to be reached from these data is that much variability characterizes a significant number of the inter-occupational service area comparisons.

Since the students did not share a basic homogeneity in certain characteristics, the position advanced by some writers (Jacob, 1957; Eddy, 1959) is not supported. Instead, the findings concur with the results reported by Rose (1963), which also dispelled the myth of student unanimity. As a consequence, any program of study, counseling perspective, or administrative philosophy must not "lump together" community college vocational students and view them as a homogeneous group. Such stereotypical orientation will only further camouflage each student's unique and individualistic qualities. It will be deleterious to the quality of his educational experience which should be devoted primarily to developing his uniqueness and individuality to the fullest potential.

RESIDENTIAL PROXIMITY AND JUNIOR COLLEGE ATTENDANCE

The findings of this research agree with other studies (Medsker and Trent, 1965; Shawl, 1966) which indicate large percentages of students attend junior college because of its proximity to their homes. About two out of 10 respondents in the present sample considered "close to home" as the most important reason why they were attending their present college; the same ratio resulted from the students' mean evaluations of a variety of possible factors as to three levels of relative importance. "Low cost" was identified by roughly the same proportion of students using either measuring procedure. For many respondents, "low cost" and "close to home" would be highly related factors; they take on added importance when it is considered that one-third of the sample were "self-supporting." Furthermore, two-thirds of the subjects were employed on at least a part-time basis while attending college.

The number of students who would not have gone to college if one were not located in their immediate area was not determined. However, it is commonly accepted that the percentage of individuals who pursue post-high school education is much greater in a community where a junior college is located than in those where one is not (Shawl, 1966). This may be explained by a variety of factors.

Given the lower socioeconomic background and limited financial resources of many community-junior college students, the junior college frequently represents their only opportunity for a higher education. As reported above, a fairly large proportion of students specified "low cost" as the basic factor responsible for

their attendance at a junior college. Tuition is either free (all of California's and some of New York's public junior colleges) or quite low. In addition, most junior colleges are primarily commuter schools and by enabling their students to live at home, they help lessen the cost of a college education.

Enrollment in a junior college would have an added appeal to some youth not desiring to abruptly sever their relationships with parents, friends, etc. As such, the community college can effectively provide the student with a needed transition between home and going away to college or work.

Individuals who may be hesitant to attend college because of the absence of sufficient motivation and/or limited academic achievement may be more willing to "give college a try" if it is possible to do so "economically" and "conveniently."

A decade ago, The President's Commission on National Goals (1961) adopted the position that two-year colleges should be constructed within commuting distance of most high school graduates. This goal has probably been accomplished. However, it is not likely a vast majority (75 percent or more)[13] of the nation's high school graduates are within commuting distance of post-secondary vocational-technical programs. In addition, many students seem to be traveling excessive distances and have only minimal accessibility to such institutions and programs. Data gathered in this study indicate more than one-fourth of the occupational students have hometowns 30 or more miles from the colleges they are attending. In an investigation by Metcalf (1965), slightly more than 15 percent of about 30,000 junior college students in Washington State traveled 20 miles or more to school.

Because of the above discussion, it is not surprising that, along with finances and motivation, geography must be considered a major factor determining whether or not an individual pursues education beyond high school (Roueche, 1968: 8-9). The massive community college building program of the 60's must continue unabated, if Eurich's (1963) dream for the turn of the century--that a community college be available for every youth within commuting distance from home--is to be realized.

OCCUPATIONAL EDUCATION AND GEOGRAPHICAL MOBILITY

Post-secondary vocational-technical institutions must be responsive to the needs of a changing society. They must adjust

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[13] Individual states in this percentage range are Florida (99 percent), California (90 percent) and New York (85 percent) (*U.S. News and World Report*, May 5, 1969: 64).

accord with instructions may be limiting factors in the generalization of the findings. Almost without exception, however, comparisons with other studies and the data distributions of the present research are consistent with expectations. Thus, it is likely the findings may be generalized with greater confidence to the universe from which the sample was selected.

Hopefully, this investigation has contributed to the limited data pool on post-secondary occupational students. On a broad basis, the results should have implications for making the educational experience more rewarding for a greater number of occupational students. The study may also serve to guide and stimulate other researchers who wish to promote understanding of a student group about which relatively little is known.

It must be stressed that the data presented in this publication do not precisely describe the student subpopulation at any given institution. As such, these findings are of general interest and relevance to the field, and do not have specific relevance or applicability to any particular community-junior college. It is with wisdom that Cross (1968: 52) wrote: "While studies of some subgroups may be conducted by national, regional, or state research centers, much greater emphasis needs to be placed on research at the local level."

A recent publication (Gartland and Carmody, 1970) indicates that roughly one-half of more than 500 two-year institutions are "regularly" conducting research in each of three areas: student satisfaction and/or success while in school; follow-up studies on vocational students who had left school and taken jobs; and demographic descriptions of students. Approximately one-fifth of the institutions reported they "never" conduct studies. Virtually all of the colleges perceived these types of studies to be useful.

Major strides have been taken toward making institutional research a viable part of the structure and function of a greater number of community colleges.[14] The concern and effort shown with reference to advancing understanding of local programs and their impact on students should continue. However, each college should also begin conducting studies in at least two other areas: (1) the needs and characteristics of potential student clienteles, college-age youth as well as adults; and (2) the educational needs of groups the college might serve (Knoell, 1969b). Research in all these areas is vital for promoting a greater development and utilization of human resources. The chance of a fuller use of

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[14]Testing companies and national educational agencies have been instrumental in assisting junior colleges conduct surveys and prediction studies of entering students.

their curricula to changing industrial-business conditions and the requirements of the labor market. There is reason to believe that this is often not the case (*School and Society*, 1970: 73). This is understandable because of the difficulties involved in matching vocational-technical programs with market patterns at the local level.

Kaufman and Lewis (1969) identified four major factors which make it almost impossible to maintain a highly congruent relationship between course offerings and occupational needs. These are: (1) prediction of labor market needs is difficult because they are susceptible to sudden, unexpected changes; (2) although an occupational program may be available for the purpose of providing training currently required by the local labor market, students may not enter such programs; (3) career plans of youth are often characterized by instability; and (4) geographic mobility is quite extensive. Data were collected in the present study which amplify the relevancy of geographical mobility in impeding the congruence between training programs and job opportunities.

It is commonplace knowledge that the geographical mobility rate in the United States is extremely high. In fact, approximately one out of five families move each year. Considering the extent of geographical mobility, it may be advisable for community colleges to offer occupational training required by the labor market of a much broader economic or market area, rather than restricting the skills taught to those required primarily for entry into locally important occupations (Thornton, 1960). This would lessen the negative effects of geographical mobility, which tends to be concentrated for a given segment of the population, within a particular economic or labor market area. This recommendation assumes greater pertinency when data on the respondents future community orientation are recalled. In reference to the question, "Do you intend to remain in this community?" the responses were almost equally divided among "no," "yes," and "not sure."

In conclusion, any effort to maximize the chances of establishing a match between available jobs and trained graduates will be fraught with difficulties. Perhaps, the only solution is to broaden the training programs and experiences of young people so they are qualified to enter a variety of occupations.

STUDY LIMITATIONS

The findings of this investigation are based on a national sample of vocational-technical students. They were enrolled in 60 public, community-junior colleges throughout the United States. The reader should keep in mind, however, that the nonparticipation of some schools randomly selected for sample inclusion and lack of assurance that all questionnaires were administered in complete

human resources to occur is enhanced if both the individual (student) and the organization (community-junior college) subscribe to an adjustment philosophy wherein both must change to the degree necessary for realizing mutual adjustment. In other words, students must make modifications in their attitudes, values, and behaviors to cope with the reward and punitive systems of the college; but at the same time, the individual colleges should initiate changes in their requirements, programs, services, regulations, etc. to more effectively meet the student needs. The research identified above is mandatory if this progressive and more functional viewpoint is to become pervasive on the post-secondary level. It will provide some of the answers whereby the colleges might better know which changes are most appropriate.

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APPENDIX A

Directions (provided for use of students in completing survey questionnaire)

Survey Questionnaire: Section I

Survey Questionnaire: Section II

Number _____

Directions

This is a research questionnaire, not an exam. You will be asked for a variety of information about your background, attitudes, and plans. The responses will be used to determine the aspirations and expectations, and other factors affecting career development of junior college students enrolled in occupational training programs. By responding to this questionnaire, junior college vocational-technical students throughout the country are being given the opportunity to provide information which will be considered in planning for future generations of students.

Please remember, this is not a test. The only right answers are those which reflect your own thoughts, feelings, and plans. Some items may seem similar to questions already asked; however, it is necessary for the analysis of the results that all questions be answered. The answers will be used for research purposes only, and in no case will the answers of individual students be singled out. Do not write your name on the questionnaire or answer sheet.

There are several questions which pertain to your father and/or mother. If someone other than your real parents raised you, answer the questions as if the persons who raised you (for example, stepfather or stepmother, foster father or mother, an uncle or aunt or somebody else) were your real parents.

Please read each of the questions carefully. The questionnaire is in two sections. In Section I (items A through K), put your answers directly on the questionnaire. In Section II (items 1 through 161), put your answers on the accompanying answer sheet.

Be sure to answer every question. Be careful when marking your answer sheet: the choices, "0" through "9," are placed horizontally (left to right) rather than vertically (top to bottom). Often, all of the spaces are not used; therefore, place your mark carefully. It will be necessary for you to work rapidly, but remember to work carefully. BEGIN SECTION I.

Number _____

QUESTIONNAIRE

Section I

"Career Development and Aspirations
of Junior College Vocational
and Technical Students"

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

MAY, 1968

220

Directions

This is a research questionnaire, not an exam. You will be asked for a variety of information about your background, attitudes, and plans. The responses will be used to determine the aspirations and expectations, and other factors affecting career development of junior college students enrolled in occupational training programs. By responding to this questionnaire, junior college vocational-technical students throughout the country are being given the opportunity to provide information which will be considered in planning for future generations of students.

Please remember, this is not a test. The only right answers are those which reflect your own thoughts, feelings, and plans. Some items may seem similar to questions already asked; however, it is necessary for the analysis of the results that all questions be answered. The answers will be used for research purposes only, and in no case will the answers of individual students be singled out. Do not write your name on the questionnaire or answer sheet.

There are several questions which pertain to your father and/or mother. If someone other than your real parents raised you, answer the questions as if the persons who raised you (for example, stepfather or stepmother, foster father or mother, an uncle or aunt or somebody else) were your real parents.

Please read each of the questions carefully. The questionnaire is in two sections. In Section I (items A through K), put your answers directly on the questionnaire. In Section II (items 1 through 161), put your answers on the accompanying answer sheet.

Be sure to answer every question. Be careful when marking your answer sheet: the choices, "0" through "9," are placed horizontally (left to right) rather than vertically (top to bottom). Often, all of the spaces are not used; therefore, place your mark carefully. It will be necessary for you to work rapidly, but remember to work carefully. BEGIN SECTION I.

SECTION I

ANSWER DIRECTLY ON THE QUESTIONNAIRE.

*(A) What is the name of the school you are presently attending?

_____

Where is it located? _____
City or Town

_____
State

*(B) What particular program of study in occupational education are you presently following?

_____

(C) What job would you <u>like</u> to have after completion of your present schooling?

_____

(D) What job do you <u>really think</u> you will be doing upon completion of your present schooling?

_____

(E) Please write down other occupations that you are seriously considering upon completion of your present schooling.

_____

(F) What job would you <u>like</u> to have five years from now?

_____

(G) What job do you <u>really think</u> you will have five years from now?

_____

(H) If the job you <u>really think</u> you will get (Question G) differs from the one you would <u>like</u> to get (Question F), what is the most <u>important</u> factor which you feel is responsible for this difference?

_____

*Only the responses to those items preceded by an asterisk are examined in this report.

(I) If your father has had training in vocational-technical education, describe the nature of his training.

_____

_____

*(J) What is (was, if retired or deceased) the usual occupation of the head of the household in your parental family, what is the job called, what kind of business or industry does he work in, and what does he do? For example, "carpenter, construction business, works on home building crew," "sales clerk, department store, waits on customers," "owner and president, large grocery chain of 15 stores, directs the business."

Name of Job: _____

Business or Industry: _____

Major Duties: _____

*(K) What course in high school did you enjoy most?

_____

GO ON TO SECTION II.

QUESTIONNAIRE

Section II

"Career Development and Aspirations
of Junior College Vocational
and Technical Students"

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

MAY, 1968

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SECTION II

REMEMBER: START WITH NUMBER 1 ON THE ANSWER SHEET. DO NOT MARK ON QUESTIONNAIRE.

Background Information

*(1) Sex:

0. male
1. female

*(2) How old were you on your last birthday?

0. 18 years and under
1. 19 years
2. 20 years
3. 21 years
4. 22 years
5. 23 years
6. 24 years and over

*(3) Race:

0. White
1. Negro
2. Oriental
3. Other

(4) Select the category which describes your position among your brothers and sisters.

0. only child
1. oldest in the family
2. neither the oldest nor youngest
3. youngest in the family

*(5) Marital status:

0. single
1. engaged
2. married, no children
3. married, with children
4. widowed, divorced or separated

*(6) What was the size of the place in which you spent most of your life?

0. a metropolis with half a million or more people
1. a suburb of such a metropolis
2. a city of 100,000 plus to 500,000 people
3. a city of 50,000 plus to 100,000 people
4. a city of 10,000 plus to 50,000 people
5. a town of 2,500 to 10,000 people
6. a town under 2,500 people
7. open country

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*Only the responses to those items preceded by an asterisk are examined in this report.

*(7) How long have you lived in your present community?

0. less than 1 year
1. at least 1 year but less than 4 years
2. at least 4 years but less than 10 years
3. at least 10 years but less than 20 years
4. over 20 years

*(8) Do you intend to remain in this community?

0. yes
1. no
2. not sure

*(9) What is your religious preference?

0. No religion
1. Catholic
2. Jewish; Orthodox
3. Jewish; Conservative
4. Jewish; Reform
5. Protestant
6. Other
7. Prefer not to answer

*(10) If you are a Protestant, which of the following is your denominational attachment? (If not Protestant, mark choice "0" below. If your denominational attachment is included under Question #11, mark choice "8" below and go on to Question #11).

0. Does not apply
1. Lutheran
2. Episcopal
3. Presbyterian
4. Congregational (United Church of Christ)
5. Christian Church (Disciples of Christ), Church of Christ
6. Christian Scientist
7. Baptist
8. None of these
9. Prefer not to answer

*(11) If you are not Protestant, or your denominational attachment was listed under Question #10, mark choice "8" below.

0. Assembly of God
1. Methodist (Brethren)
2. Seventh Day Adventist
3. Greek Orthodox
4. Latter Day Saints (Mormon)

5. Unitarian or Universalist
6. Covenant
7. Other
8. Already answered
9. Prefer not to answer

(12) About how often have you attended religious services in the last year?

0. more than once a week
1. about once a week
2. about 2 or 3 times a month
3. once a month
4. a few times a year or less
5. never

*(13) To what extent has your previous work experience influenced you to enter the occupational field for which you are preparing?

0. very large
1. large
2. average
3. small
4. very small

*(14) Are you presently a participant in a cooperative program?

0. yes
1. no

*(15) During the present school year, what is the average number of hours per week you work for money outside the home? (Exclude participation in cooperative program).

0. none
1. 1 to 10 hours
2. 11 to 20 hours
3. 21 to 30 hours
4. more than 30 hours

*(16) Does your job relate to the program of study you are taking and your future work plans?

0. not working
1. yes
2. no

About Home and Parents

*(17) Select the sentence which best describes your real parents during most of your life.

0. They were living together.
1. Both were dead.
2. Father was dead, but mother was living.
3. Mother was dead, but father was living.

4. They were divorced.
5. They were separated.
6. Other

(18) Which of the following was most responsible for raising you?

0. both parents
1. father and stepmother
2. mother and stepfather
3. mother alone
4. father alone
5. grandparents
6. other relatives
7. foster home
8. other

*(19) What was the last year of schooling completed by your father?

0. less than 7 years of school
1. completed junior high school (9 years of school)
2. some high school (did not graduate)
3. graduated from high school or equivalent
4. some college or university or other post-high school training
5. graduated from college or university
6. some graduate or professional school
7. completed graduate or professional school

*(20) What was the last year of schooling completed by your mother?

0. less than 7 years of school
1. completed junior high school (9 years of school)
2. some high school (did not graduate)
3. graduated from high school or equivalent
4. some college or university or other post-high school training
5. graduated from college or university
6. some graduate or professional school
7. completed graduate or professional school

(21) Does (did) your father have any training in vocational-technical education?

0. yes
1. no
2. don't know

*(22) What do you estimate as the income of the head of the household in your parental family?

0. I have no idea.
1. less than $3,000
2. $3,000 to $4,999
3. $5,000 to $6,999
4. $7,000 to $8,999
5. $9,000 to $10,999
6. $11,000 to $12,999
7. $13,000 to $14,999
8. over $15,000

(23) To which one of the following "social classes" do you think your family belongs?

0. upper-upper class
1. lower-upper class
2. upper-middle class
3. lower-middle class
4. working class
5. lower class
6. don't know

*(24) How did your father feel about your attending college?

0. took it for granted I would go to college
1. actively urged me to go to college
2. just said it was up to me
3. had mixed feelings about my attending college
4. was somewhat opposed to my attending college
5. don't know

*(25) How did your mother feel about your attending college?

0. took it for granted I would go to college
1. actively urged me to go to college
2. just said it was up to me
3. had mixed feelings about my attending college
4. was somewhat opposed to my attending college
5. don't know

(26) What does your father think of your present occupational plans?

0. thinks I am shooting too high
1. thinks it is a good occupation and I have a chance of making it
2. thinks I should be trying for something different
3. he says it is entirely up to me to get what I want
4. I have never discussed it with him

(27) What does your mother think of your present occupational plans?

0. thinks I am shooting too high
1. thinks it is a good occupation and I have a chance of making it

2. thinks I should be trying for something different
3. she says it is entirely up to me to get what I want
4. I have never discussed it with her

*(28) How important is it to your parents that you receive good grades in school?

0. very important
1. quite important
2. fairly important
3. not very important
4. not important at all

*(29) How important is it to your parents that you study hard?

0. very important
1. quite important
2. fairly important
3. not very important
4. not important at all

*(30) How important is it to your parents that you go to this college?

0. very important
1. quite important
2. fairly important
3. not very important
4. not important at all

(31) How important is it to your parents that you go on for more education?

0. very important
1. quite important
2. fairly important
3. not very important
4. not important at all

(32) How important is your choice of a career to your parents?

0. very important
1. quite important
2. fairly important
3. not very important
4. not important at all

*(33) How important to your parents is your success in finding the work you want?

0. very important
1. quite important
2. fairly important
3. not very important
4. not important at all

(34) How important is your choice of friends to your parents?

0. very important
1. quite important
2. fairly important
3. not very important
4. not important at all

(35) How important is your <u>choice of leisure time activities</u> to your parents?

0. very important
1. quite important
2. fairly important
3. not very important
4. not important at all

Attitudes Toward Yourself

*(36) I feel that I am a person of worth, at least on an equal plane with others.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

*(37) I feel that I have a number of good qualities.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

*(38) All in all, I am inclined to feel that I am a failure.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

*(39) I am able to do things as well as most other people.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

*(40) I feel I do not have much to be proud of.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

*(41) I take a positive attitude toward myself.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

*(42) On the whole, I am satisfied with myself.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

*(43) I certainly feel useless at times.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

*(44) I wish I could have more respect for myself.

0. strongly agree
1. agree
2. disagree
3. strongly disagree

Educational Training

*(45) Which of these categories best describe the high school from which you graduated?

0. Comprehensive High School (Offers general-academic program as well as vocational programs in at least three areas of vocational education).
1. General-Academic High School (Offers vocational programs in less than three areas of vocational education).
2. Vocational-Technical High School (All students are enrolled in a vocational program).
3. Area Vocational-Technical High School (All students are enrolled in a vocational program).
4. Private High School (Church-related).
5. Other

*(46) While you were in high school, did you get mostly: (Mark only one)

0. A's
1. A's and B's
2. B's
3. B's and C's
4. C's
5. C's and D's
6. D's
7. D's and F's

On the high school level, how many semesters were you enrolled in courses in each of the following areas (Questions 47 through 53) of vocational-technical education?

*(47) Agriculture (horticulture, agriculture I, II, III and IV, etc.)

0. 0 semesters
1. 1 semester
2. 2 semesters
3. 3 semesters
4. 4+ semesters

*(48) Business and Office (typing, shorthand, office machines, etc.)

0. 0 semesters
1. 1 semester
2. 2 semesters
3. 3 semesters
4. 4+ semesters

*(49) Distributive Education (merchandising, advertising, salesmanship, etc.)

0. 0 semesters
1. 1 semester
2. 2 semesters
3. 3 semesters
4. 4+ semesters

*(50) Health Occupations (practical nursing, ward secretaries, hospital orderlies, etc.)

0. 0 semesters
1. 1 semester
2. 2 semesters
3. 3 semesters
4. 4+ semesters

*(51) Home Economics (food planning and preparation, sewing, child care, etc.)

0. 0 semesters
1. 1 semester
2. 2 semesters
3. 3 semesters
4. 4+ semesters

*(52) Technical (mechanical technology, electronics technology, drafting design, etc.)

0. 0 semesters
1. 1 semester
2. 2 semesters
3. 3 semesters
4. 4+ semesters

*(53) Trade and Industry (auto mechanics, machine shop, carpentry, etc.)

0. 0 semesters
1. 1 semester
2. 2 semesters
3. 3 semesters
4. 4+ semesters

*(54) Compared to most students in your high school class, your participation in extracurricular activities was:

0. greater than average
1. about average
2. less than average

*(55) After you left high school, what did you do?

0. came directly to this college
1. attended another school first
2. worked before entering college
3. was in military service
4. stayed at home, not working
5. other

*(56) If you worked full-time before entering college, how many years did you work?

0. worked less than 1 year
1. 1 year
2. 2 years
3. 3 years
4. 4 years
5. 5 years or more
6. did not work full-time

*(57) Why are you attending the particular college you are? Select the most important reason.

0. close to home
1. low cost
2. special program or courses offered
3. friends attending here
4. opportunity to work while in school
5. reputation of school
6. family
7. high school vocational education teacher
8. high school guidance counselor(s)
9. other reason

*(58) Select the second most important reason why you are attending the particular college you are.

0. close to home
1. low cost
2. special program or courses offered
3. friends attending here
4. opportunity to work while in school
5. reputation of school
6. family
7. high school vocational education teacher
8. high school guidance counselor(s)
9. other reason

*(59) Select the third most important reason why you are attending the particular college you are.

0. close to home
1. low cost
2. special program or courses offered
3. friends attending here
4. opportunity to work while in school
5. reputation of school
6. family
7. high school vocational education teacher
8. high school guidance counselor(s)
9. other reason

*(60) Which of the following best describes the one-way distance between your hometown and this college?

0. less than 5 miles
1. 5 to 10 miles
2. 11 to 15 miles
3. 16 to 20 miles
4. 21 to 25 miles
5. 26 to 30 miles
6. more than 30 miles

*(61) Approximately how many students are enrolled in the school you are presently attending?

0. under 500
1. 500 to 999
2. 1000 to 1499
3. 1500 to 1999
4. 2000 to 2499
5. 2500 and over

*(62) Mark on your answer sheet the number corresponding to the classification below which applies to you.

0. freshman, full-time
1. freshman, part-time
2. sophomore, full-time
3. sophomore, part-time
4. other

*(63) Of the following, who would you say influenced you the most in the choice of your program of study in occupational education?

0. father
1. mother
2. brothers or sisters
3. fellow students
4. guidance counselor
5. high school vocational education teacher
6. other high school teacher
7. post-high school teacher
8. friends, or relatives (other than parents, brothers, or sisters)
9. other

*(64) Select the response below which comes closest to suggesting how you learned about the particular program of study in which you are presently enrolled.

0. high school vocational or guidance counselor
1. high school vocational education teacher
2. other high school teacher
3. parents
4. other relatives
5. friends
6. others

*(65) In your opinion, how adequate is the occupational training you are receiving in preparing you for the job you want to enter when you finish?

0. very adequate
1. fairly adequate
2. fairly inadequate
3. very inadequate

*(66) What is your main source of financial support while attending college?

0. self-supporting
1. parents
2. other relatives
3. personal savings
4. loan
5. governmental assistance, other than loans
6. scholarship
7. employer paying for course
8. other

Your Relationships With Others

(67) In comparison to other students of your age, would you say you have more, less, or about the same number of friends?

0. more
1. less
2. about the same

(68) Before you do something, do you try to consider how your friends will react to it?

0. yes, I always do
1. yes, I usually do
2. sometimes I do
3. no, usually not
4. no, never

(69) Think of your two closest high school friends. Select the response below which indicates their educational plans in comparison to your own.

0. both lower
1. both the same
2. both higher
3. one lower and one higher
4. one lower and one the same
5. one the same and one higher

(70) Think of your two closest high school friends. Indicate below the general level of their parents' educational achievements in comparison to your parents'.

0. both lower
1. both the same
2. both higher
3. one lower and one higher
4. one lower and one the same
5. one the same and one higher

(71) How would you rate your childhood?

0. very happy
1. happy
2. average
3. unhappy
4. very unhappy

(72) How would you describe the amount of attachment between you and your father?

0. extremely close
1. very close
2. considerable
3. some
4. a little
5. none at all

(73) How would you describe the amount of attachment between you and your mother?

0. extremely close
1. very close
2. considerable
3. some
4. a little
5. none at all

(74) During your childhood, who do you think was your father's favorite?

0. older brother
1. younger brother
2. older sister
3. younger sister
4. only child
5. yourself
6. no favorite
7. don't know

(75) During your childhood, who do you think was your mother's favorite?

0. older brother
1. younger brother
2. older sister
3. younger sister
4. only child
5. yourself
6. no favorite
7. don't know

Goal Related Attitudes and Values

*(76) How important to you, personally, is it to get ahead in life?

0. very important
1. fairly important
2. not very important
3. very unimportant

*(77) Realistically speaking, how good are your chances of getting ahead?

0. excellent
1. pretty good
2. fair
3. somewhat limited
4. not much chance

*(78) Which of these qualities is the most important for success?

0. a special talent or aptitude
1. luck
2. ability to get along with people
3. high degree of intelligence
4. knowing the "right" people
5. lots of hard work and effort

*(79) Which of these qualities is the second most important for success?

0. a special talent or aptitude
1. luck
2. ability to get along with people
3. high degree of intelligence
4. knowing the "right" people
5. lots of hard work and effort

(80) Which of the following do you expect to give you the most satisfaction in your life?

0. your career or occupation
1. family relationships
2. leisure time recreational activities
3. religious beliefs or activities
4. participation as a citizen in the affairs of your community
5. participation in activities directed toward national or international betterment

(81) Which do you expect to give you the next most satisfaction?

0. your career or occupation
1. family relationships
2. leisure time recreational activities
3. religious beliefs or activities
4. participation as a citizen in the affairs of your community
5. participation in activities directed toward national or international betterment

(82) Which one of the following do you think will be most important to you in your future life?

0. being well liked
1. financial security
2. becoming happy and content
3. having the time and means to relax and enjoy life
4. finding a real purpose in life
5. obtaining rewards and recognition

6. becoming famous
7. becoming a mature person
8. following a formal religious code

*(83) Choose your <u>most important</u> goal in attending college.

0. to develop my personality
1. to develop my mind and intellectual abilities
2. to secure vocational or professional training to obtain a job
3. to make a desirable marriage
4. to earn a higher income
5. to kill time, nothing else to do
6. to become a cultured person
7. to avoid being drafted
8. to please my parents
9. none of these

*(84) Choose your <u>second most important</u> goal in attending college.

0. to develop my personality
1. to develop my mind and intellectual abilities
2. to secure vocational or professional training to obtain a job
3. to make a desirable marriage
4. to earn a higher income
5. to kill time, nothing else to do
6. to become a cultured person
7. to avoid being drafted
8. to please my parents
9. none of these

(85) About how much money do you expect to earn during the first year following completion of your present schooling?

0. less than $4,000
1. $4,000 to $4,999
2. $5,000 to $5,999
3. $6,000 to $6,999
4. $7,000 to $7,999
5. $8,000 to $8,999
6. $9,000 to $9,999
7. $10,000 and over
8. does not apply
9. don't know

There is a tendency for us to "look up to" some occupations and to "look down on" others. That is, certain occupations have a higher general standing or greater prestige than others. In the following list are 34 occupations. Please select the letter which you think best represents your evaluation of the

general standing or prestige of each occupation. Select only one of the six possible choices. You are not to base your judgement upon any particular person, but simply evaluate the occupations according to your own personal opinions. In addition, Question 120 asks that you indicate the prestige evaluation of your proposed occupation (Question C, Section I).

(86) Baker

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(87) Barber

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(88) Bookkeeper

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(89) Captain in the regular army

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(90) Carpenter

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(91) Civil engineer

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(92) Clerk in a store

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(93) College professor

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(94) Dockworker

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(95) Electrician

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(96) Farm owner and operator

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(97) Garage mechanic

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(98) Garbage collector

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(99) Insurance agent

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(100) Janitor

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(101) Lawyer

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(102) Machine operator in a factory

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(103) Manager of a small store in a city

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(104) Minister

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(105) Musician in a symphony orchestra

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(106) Nuclear physicist

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(107) Owner of a factory that employs about a hundred people

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(108) Physician

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(109) Psychologist

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(110) Public school teacher

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(111) Restaurant cook

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(112) Restaurant waiter

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(113) Singer in a nightclub

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(114) State governor

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(115) Trained machinist

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(116) Traveling salesman for a wholesale concern

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(117) Truck driver

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(118) Undertaker

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(119) Vocational education teacher

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(120) Proposed occupation as indicated in Question C, Section I.

0. excellent
1. good
2. average
3. below average
4. poor
5. don't know

(121) Which one of these statements best describes something you would call work?

0. Work is not enjoyed, not liked.
1. Work is effort, physical or mental.
2. Work is something for which you are paid.
3. Work is required, something you have to do.
4. Work is something productive, a contribution.
5. Work is scheduled and done regularly.

(122) Which one of these statements is the second best description of something you would call work?

0. Work is not enjoyed, not liked.
1. Work is effort, physical or mental.
2. Work is something for which you are paid.
3. Work is required, something you have to do.
4. Work is something productive, a contribution.
5. Work is scheduled and done regularly.

Educational Goals

(123) Which of the following best describes the amount of education you hope to obtain during your present stay in school?

0. complete 2 year program of study
1. complete 2 year program of study and continue education elsewhere
2. complete 1 year of study
3. other

(124) Which of the following best describes the amount of education you really think you will be able to complete during your present stay in school?

0. complete 2 year program of study
1. complete 2 year program of study and continue education elsewhere
2. complete 1 year of study
3. other

(125) What do you expect to do after you finish your present schooling?

0. take further job training
1. enter a 4-year college to obtain a degree
2. enter military service
3. have a definite job lined up for which you are training
4. have a definite job lined up for which you have not trained
5. look for work in line with your training
6. look for some other work
7. be a housewife
8. other

(126) How far would you like to go in school? That is, how much education would you like to get?

0. will not finish the classes I am taking now
1. will finish the classes I am taking now
2. will finish 1 year of college
3. will finish the 2-year program of study I am in
4. will finish 3 years of college
5. will get bachelor's degree
6. will do some graduate work
7. will get master's degree
8. will do graduate work toward Ph.D. (or other professional degree)
9. other

(127) Sometimes, for one reason or another, people don't always get as much education as they would like. How far do you <u>really think</u> you will go in school? That is, how much education do you <u>really think</u> you will get?

0. will not finish the classes I am taking now
1. will finish the classes I am taking now
2. will finish 1 year of college
3. will finish the 2-year program of study I am in
4. will finish 3 years of college
5. will get bachelor's degree
6. will do some graduate work
7. will get master's degree
8. will do graduate work toward Ph.D. (or other professional degree)
9. other

(128) How important is it for you to get the amount of education you would <u>like</u> to get (as indicated in Question 126 above)?

0. very important
1. important
2. fairly important
3. unimportant
4. very unimportant

(129) If the education you <u>really think</u> you will get (Question 127) is less than that you would <u>like</u> to get (Question 126), what is the most important factor which you feel is responsible for this difference?

0. no difference
1. lack of finances
2. not smart enough
3. tired of school
4. marriage
5. parents (want me to do something else)
6. grades not high enough
7. lack of motivation
8. military service
9. other

Students have different ideas about the main purpose of college education. How important is each of the following six items (Questions 130 through 135) with respect to what you feel is the main purpose of a college education?

(130) Provides vocational training; develops skills and techniques directly applicable to your career.

0. extremely important
1. very important
2. of some importance
3. not important at all

(131) Develops your ability to get along with different kinds of people.

0. extremely important
1. very important
2. of some importance
3. not important at all

(132) Provides a basic general education and appreciation of ideas.

0. extremely important
1. very important
2. of some importance
3. not important at all

(133) Develops your knowledge and interest in community and world problems.

0. extremely important
1. very important
2. of some importance
3. not important at all

(134) Helps develop your moral capacities, ethical standards, and values.

0. extremely important
1. very important
2. of some importance
3. not important at all

(135) Prepares you for a happy marriage and family life.

0. extremely important
1. very important
2. of some importance
3. not important at all

(136) Select the item below which, in your opinion, represents <u>the main purpose</u> of a college education.

0. provides vocational training; develops skills and techniques directly applicable to your career
1. develops your ability to get along with different kinds of people
2. provides a basic general education and appreciation of ideas
3. develops your knowledge and interest in community and world problems
4. helps develop your moral capacities, ethical standards, and values
5. prepares you for a happy marriage and family life

<u>Occupational Goals</u>

*(137) During what grade of school did you decide your present occupational plans?

0. grade school
1. junior high school (7-9)
2. sophomore year in high school
3. junior year in high school
4. senior year in high school
5. period between high school and college
6. freshman year of junior college
7. sophomore year of junior college
8. still undecided
9. don't remember

(138) What do you think you will dislike most about the job you <u>really think</u> you will be doing (as indicated in Question D, Section I)?

0. will not provide me with an opportunity to use my special abilities
1. will not provide me with a chance to earn a great deal of money
2. will not permit me to be creative and original
3. will not give me social status and prestige
4. will not give me an opportunity to work with people, as opposed to things
5. will not enable me to look forward to a stable and secure future
6. will not leave me relatively free of supervision by others
7. will not give me an opportunity to be helpful to others
8. I do not think I will dislike anything about this job.
9. other

(139) How important is it to you to get the job you would <u>like</u> to have five years from now (as indicated in Question F, Section I)?

0. very important
1. important
2. fairly important
3. unimportant
4. very unimportant

(140) If you could have your own choice in the matter, what kind of firm or outfit would you like best to work in after you finish your present schooling?

0. own business
1. own professional office
2. own farm
3. social agency
4. other nonprofit organization
5. government bureau or agency
6. teaching
7. family business or enterprise
8. private firm, organization, factory
9. other

Suppose you were offered an opportunity to make a major advance in a job or occupation. Select the response which indicates how important each of the following considerations (Questions 141 through 151) would be in stopping you from making that advance.

(141) endanger your health

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(142) leave your family for some time

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(143) move around the country a lot

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(144) leave your community

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(145) leave your friends

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(146) give up leisure time

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(147) keep quiet about religious views

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(148) keep quiet about political views

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(149) learn a new routine

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(150) work harder than you are

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

(151) take on more responsibility

0. might stop me from making the change
1. would be a serious consideration but wouldn't stop me
2. wouldn't matter at all

How important are the following 8 items (Questions 152 through 159) in your choice of a job?

(152) an opportunity to use my special abilities

0. very important
1. of some importance
2. not important at all

(153) a chance to earn a great deal of money

0. very important
1. of some importance
2. not important at all

(154) the opportunity to be creative and original

0. very important
1. of some importance
2. not important at all

(155) social status and prestige

0. very important
1. of some importance
2. not important at all

(156) an opportunity to work with people rather than things

0. very important
1. of some importance
2. not important at all

(157) the assurance of a stable and secure future

0. very important
1. of some importance
2. not important at all

(158) relatively free of supervision by others

0. very important
1. of some importance
2. not important at all

(159) an opportunity to be helpful to others

0. very important
1. of some importance
2. not important at all

(160) How well will the job you <u>really think</u> you will have five years from now (as indicated in Question G, Section I) satisfy the requirements you marked as "very important" above (Questions 152 through 159)?

0. will satisfy most of them
1. will satisfy some of them
2. will satisfy few of them
3. will satisfy none of them

(161) Here are three different kinds of jobs. If you had to make a choice among the three, which would you pick?

0. a job which pays a moderate income but which you are sure of keeping
1. a job which pays a good income but which there is a 50/50 chance of losing
2. a job which pays an extremely good income if you make the grade but in which you will lose almost everything if you don't make it

APPENDIX B

Letter Directed to Administrative Head of Junior College (requesting participation of college in study)

Follow-up Letter (requesting participation)

240/241

The Center For RESEARCH AND LEADERSHIP DEVELOPMENT IN

Vocational and Technical Education

THE OHIO STATE UNIVERSITY
1900 KENNY ROAD
COLUMBUS, OHIO 43210

April 10, 1968

The Center for Vocational and Technical Education is conducting a national study to determine the aspirations, expectations, and other factors affecting career patterns of junior college students enrolled in occupational programs. This study will have important implications for vocational guidance, curricula and program design, and worker adjustment. The project has been discussed with Dr. Lewis R. Fibel, Specialist in Occupational Education, The American Association of Junior Colleges, who has concurred that the results will be of significant value and interest to the occupational education project of The American Association of Junior Colleges.

A random sample of 140 junior colleges which offer courses in occupational education has been identified and is being asked to participate in this survey. Participation will involve classroom administration of a pencil-paper questionnaire which will take about 50 minutes to complete. It will be necessary that local representatives of each of the selected schools act as questionnaire administrators. These administrators will be paid an average of 25 cents for each completed questionnaire. The number of questionnaires to be completed in each school will vary, depending on the size of the school. Approximately 25 to 250 respondents will represent each of the schools.

The questionnaire has been approved by the U.S. Office of Education, which is providing the financial support for this research. The names of the cooperating schools will be treated as confidential information. The questionnaire is anonymous; an impersonal statistical analysis will be performed.

We urgently need the cooperation of your school. Participating schools will be given a complimentary copy of the final report. Please complete the enclosed postal card and return it to us by April 25. Thank you very much.

Sincerely yours,

A. P. Garbin
Project Co-Investigator

Enclosure

IN COOPERATION WITH THE UNITED STATES OFFICE OF EDUCATION

The Center For RESEARCH AND LEADERSHIP DEVELOPMENT IN
Vocational and Technical Education

THE OHIO STATE UNIVERSITY
1900 KENNY ROAD
COLUMBUS, OHIO 43210

April 25, 1968

Dear

Several schools have indicated a willingness to participate in our national survey on the career development patterns of junior college students enrolled in vocational-technical programs. However, the quality and importance of the study will be enhanced considerably if additional schools participate.

A response to my letter of April 10 has not been received from your school. It would be appreciated greatly if you indicate on the enclosed postal card whether or not it is permissible for your school to be included in the national sample. We would like to have this card returned as soon as possible. Please disregard this request if you have returned the card enclosed in my previous letter. It is planned to have the data collected sometime during the first two weeks of May.

If you have any questions regarding the study, feel free to call me collect at the following number: Area Code 614, 293-7536. Thank you very kindly.

Sincerely,

A. P. Garbin
Project Co-Investigator

APG:mmf

Enclosure

APPENDIX C

Questionnaire (used by panel of judges to classify courses in vocational-technical education as to service area)

(The suggested classification is also indicated on the questionnaire.)

TO: Dr. Cotrell
Dr. Hensel
Dr. Huffman
Dr. Lee
Dr. Miller
Dr. Vivian

FROM: Al Garbin

DATE: April 10, 1968

SUBJECT: Request That Service Area Specialists Serve as Panel of Judges

Your assistance is needed with reference to one phase of the sampling procedure to be used for Project 57. On the following pages are enumerations of a variety of courses offered by junior colleges throughout the country. Based on your knowledge and experience, please classify these courses as to the service area of vocational-technical education which each is most likely to represent.

It would be greatly appreciated if you would return the categorizations to me by Monday, April 15.

Thank you for your cooperation.

Classification Key

Please enter one abbreviation in each space.

VA = Vocational Agriculture

BO = Business and Office

DE = Distributive Education

HO = Health Occupations

HE = Home Economics

TE = Technical Education

TI = Trade and Industry

DK = Don't Know

Accounting	BO
Administration and Management	BO
Adult Education	DK
Advertising	DE
Aeronautical Engineering Technology	TE
Agricultural Business	VA
Agricultural Engineering	TE*

NOTE:

The suggested classifications which resulted are indicated in what were blank spaces at the time the panel members made their evaluations.

If there is no asterik following the service area or "Don't know" classification, this means the panel agreed unanimously as to the classification. One asterisk (*) denotes plurality opinion; two asterisks (**) designates other sources, e.g., relevant literature, were also consulted for assistance in classification. The latter evaluation procedure was used when (1) at least a plurality did not characterize the panel members' evaluations and (2) it was possible to consult other sources.

Agricultural Engineering Technology	TE
Agricultural Machine Technology	TE
Agriculture	VA
Agriculture and Forestry	VA
Agriculture and Life Sciences	VA
Air-Conditioning Engineering Technology	TE
Airline Hostess	DK
Animal Husbandry	VA
Animal Science	VA
Apparel Design	HE
Apprentices (Aeronautics, carpentry, plumbing)	TI
Architectural and Civil Engineering Technology	TE
Architectural Drafting and Design Technology	TE
Architecture and Architectural Drafting	TI*
Art	TI*
Auto Body/Mechanics	TI
Automotive Engineering Technology	TE
Automotive Technology	TE
Aviation	TI**
Aviation Administration	TE**
Banking	BO*
Biological Science	DK
Broadcasting	TE**
Building Contracting	TI**
Building Mechanics	TI
Business	BO

Business Administration	BO
Business and Economics	BO
Business Law	BO
Business Machines	BO
Carpentry	TI
Chemical Engineering Technology	TE
Chemical Technology	TE
Civil Engineering Technology	TE
Civil Technology	TE
Clothing Technology	HE
Commercial Art	TI*
Commercial Banking	TI**
Computer	BO
Conservation	VA
Construction	TI
Correction Administration	TE**
Cosmetology	TI
Credit Management	BO*
Dairy Food Technology	VA
Data Processing	BO
Data Processing Engineering Technology	TE
Day Care	HE
Dental Assisting	HO
Dental Hygiene	HO
Dental Technology	HO
Dentistry	HO*

Design - Mechanical	TI*
Design - Tool	TI*
Drafting	TI
Dry Cleaning	TI
Economics	BO
Electrical and Electronic Engineering Technology	TE
Electrical Engineering Technology	TE
Electricity and Electronics	TI**
Electromechanical Technology	TE
Electronics	TE**
Electronics Technology	TE
Engineering	TE*
Engineering Design Technology	TE
Engineering Technology	TE
Escrow Technology	BO
Executive Secretarial	BO
Farm Machinery Maintenance Technology	VA*
Fashion Design	HE*
Fashion Merchandising	DE
Fire Protection Technology	TI*
Fire Science	TI
Flight Training	TI**
Floriculture	VA
Food Marketing Management	DE
Food and Motel/Hotel Technology	DE*
Food Service Administration	HE*

Foreign Languages	DK
Forestry	VA*
Gas Engineering Technology	TE
General Education	DK
Geography	DK
Government Career Service	BO**
Graphic Arts	TI
Highway Technology	TE
Home Economics	HE
Home Economics and Nutrition	HE
Home Economics and Secretarial	HE*
Hospital Administration	BO
Hotel/Motel Administration	BO*
Industrial Arts	TI**
Industrial Engineering	TE**
Industrial Engineering Technology	TE
Industrial Laboratory Technology	TE
Industrial, Mechanical, and Metallurgical Engineering Laboratory	TE**
Industrial Purchasing	BO*
Industrial Supervision	TI*
Industrial and Technical Education	TE*
Inhalation Therapy	HO
Instrument Engineering	TE**
Instrumentation Technology	TE
Insurance	BO

Interior Design	HE
Journalism	DK
Laboratory Technology	TE*
Landscaping	VA
Language Arts	DK
Law	DK
Liberal Arts	DK
Library Science	DK
Livestock Production Technology	VA
Machine Design	TI*
Machine Shop	TI
Machine Technology	TE
Management Training	BO*
Manufacturing Technology	TE*
Manufacturing Trade and Apprentices	TI
Marine Technology	TE*
Marketing	DE
Mass Communications	DK
Mathematics	DK
Mechanical Engineering Technology	TE
Mechanics	TI*
Medical Assisting	HO
Medical Laboratory Technology	HO
Medical Records	BO
Medical Secretarial	BO
Medical Technology	TE

Medicine	DK
Merchandising	DE
Metal and Machine	TI**
Metallurgical Engineering Technology	TE
Millworking	TI
Mortuary Science	TI*
Music	DK
Nuclear Technology	TE
Nursery Education	HE
Nursery School Technology	HE
Nursery School Training	HE*
Nursing	HO
Nursing Aide	HO
Nursing - Cooperative	HO
Nursing - Practical	HO
Nursing - Registered	HO
Nursing - Vocational	HO
Oceanography	DK
Office Machine Repair	TI
Office Machines	BO
Opthalmic Optics	TE**
Optometry	DK
Ornamental Horticulture	VA
Petroleum Marketing Management	DE*
Petroleum Technology	TE
Pharmacy	DK

Photography	TI*
Physical Education and Recreation	HO**
Physical Science	DK
Physical Science and Mathematics	DK
Pilot Training	TI**
Plumbing	TI
Police Science	TI*
Police Technology	TE*
Political Science	DK
Printing	TI
Production Management	BO*
Psychology	DK
Public Health	HO
Quality Control Technology	TE*
Radio-TV Broadcasting	TE**
Radio-TV Repair/Service	TI
Radiology	HO*
Real Estate	DE*
Real Estate and Insurance	DE*
Recreation	DK
Retail Marketing Management	DE
Retailing	DE
Salesmanship and Retailing	DE
Sciences	DK
Secretarial	BO
Secretarial and Clerical	BO

Secretarial Insurance	BO
Sheet Metal/Welding	TI
Shoe Rebuilding	TI
Sign Art	TI
Social Science	DK
Social Welfare	DK
Sociology	DK
Speech and Drama	DK
Structural Design	TE**
Surveying	TE
Tailoring	TI
Teaching	DK
Teaching Aide	DK
Technical Illustration	TE
Technical Secretarial	BO
Telecommunications	TE*
Textile Engineering Technology	TE
Therapy	HO
Tool Engineering Technology	TE
Tool and Manufacturing	TI**
Trade and Industrial Arts	TI**
Transportation	TI**
Transportation and Traffic Management	BO*
Turf Grass Technology	VA
Upholstering	TI
Urban Development	DK

Urban Development Assistance	DK
Veterinary Science	DK
Watch Repair	TI
Welding	TI
Welding Technology	TE
X-Ray Technology	HO

APPENDIX D

Letter Directed to Questionnaire Administrator

Sampling Information Sheet

General Information Regarding Questionnaire Administration Procedures and Return of Completed Material

Questionnaire Administrator's Form (used for payment purposes)

The Center For RESEARCH AND LEADERSHIP DEVELOPMENT IN

Vocational and Technical Education

THE OHIO STATE UNIVERSITY
1900 KENNY ROAD
COLUMBUS, OHIO 43210

Dear Questionnaire Administrator:

As is frequently the case in research, the collection of data is done by individuals from the various locations to be sampled. In the chain of events from conception to completed project there is no more important link than the research instrument administrator. In recognition of this, we express our appreciation for the cooperation which you and your school have extended to us.

We have attempted to provide pertinent information and specific instructions to help ease administrative problems. It is realized, of course, that we have not been able to anticipate all the difficulties which may arise in the multitude of particular circumstances; we only hope they will not prove insurmountable.

The material accompanying this letter contains information as to which students will be administered the questionnaire (sampling information sheet) and information regarding administration procedures and return of completed material. Since some schools will have more than one questionnaire administrator, multiple copies of this material have been sent to you.

It is to be hoped that you will be able to return the completed material during the first two weeks of May or as soon thereafter as possible.

Once again accept our thanks for your cooperation.

Sincerely yours,

A. P. Garbin
Project Co-Investigator

Derrald Vaughn
Research Associate

APG/DV:mmf

Enclosures

IN COOPERATION WITH THE UNITED STATES OFFICE OF EDUCATION

SAMPLING INFORMATION

_____'s contribution
Name of School

to the national sample is _____ students. The sample should
Number

correspond to the following distribution as closely as possible. If this is impossible, feel free to substitute students from other courses similar to those listed. Some students may be enrolled in more than one of the courses listed below. Please make certain that a particular student only responds to a single questionnaire.

Service Area	Examples of Courses Included in This Area	Number
_____	_____	_____
	_____	
_____	_____	_____
	_____	
_____	_____	_____
	_____	
_____	_____	_____
	_____	
_____	_____	_____
	_____	

GENERAL INFORMATION

The success of the present study depends to a considerable extent on the questionnaire administrators. It is necessary that all questionnaire administrators use a standardized procedure in administering and returning the questionnaires to The Center. The information which follows is divided into three parts: (1) a discussion regarding the questionnaire; (2) directions for administering the questionnaire; and (3) information regarding payment and the return of completed questionnaires and IBM answer sheets to The Center.

(1) The Questionnaire

The questionnaire is divided into two sections and takes approximately 45 minutes to complete. Section I contains a few "open-end" questions; each of which is identified by a letter. Responses to these questions are to be written directly on the questionnaire. The several items comprising Section II are numbered; the answers to these questions are to be marked on the IBM answer sheet. The answer sheets are the code sheets to be used for data analysis; they will be processed through an automatic keypunch. This means that only a #2 pencil may be used in responding to the questionnaire, and that great care should be taken with the answer sheets; wrinkles or stray marks may invalidate them.

The answer sheet has a serial number in the upper right-hand corner. After the materials (pencils, questionnaires, IBM answer sheets) have been distributed, each student should write this number in the space provided on the cover page of Section I of his questionnaire.

(2) Directions for Administration

The questionnaire administrator is requested to read directly to the students each of the following paragraphs enclosed with quotation marks.

"You are about to be given a Research Questionnaire from The Center for Vocational and Technical Education, The Ohio State University. It should take approximately 45 minutes to complete."

Distribute a pencil, questionnaire (Sections I and II), and IBM answer sheet to each student participating in the study. (If possible, these should be distributed before the students are seated.)

"You should have in front of you now, a questionnaire, an answer sheet, and a #2 pencil. Use this pencil in marking your answers. If you break the lead of your pencil, I have some extras. At the upper right-hand corner of your IBM answer sheet, there is a number. At this time, please write this number in the blank space on the cover page of your questionnaire (pause long enough for students to write in the number)."

"Now, take your answer sheet and examine it closely. You will notice that the item numbers are arranged so that the odd-numbered items are listed down the left-hand side of the sheet and the even-numbered items down the middle. Despite this arrangement, all questions are to be answered in order. Also, notice that the spaces to be used to mark your answers are numbered 0-9. Many questions do not use all of these spaces; therefore, you will have to mark carefully so that you do not mark a space that does not correspond to a response listed in the questionnaire. Spaces are provided on both sides of the answer sheet, so when you have completed the first side, turn the answer sheet over and continue on the back. It is extremely important that you make no stray marks, smudges, or wrinkles on your answer sheet. You may erase, but if you do, make certain the first mark is erased completely."

"The questionnaire is divided into two sections. Only on Section II, I repeat, only on Section II will you use the answer sheet. On Section I, you will write your answers directly on the questionnaire."

"When you have finished your questionnaire, place Section I and your answer sheet in separate stacks at the front of the room. Discard Section II, but make sure it is only Section II that you throw away."

"On the first page of the questionnaire are printed instructions. You may now read these instructions and begin answering the questions. Work quickly but carefully."

(3) Shipping and Payment

At this point, Section I of the questionnaire and the completed IBM answer sheets should be in separate stacks. The IBM answer sheets should now be replaced between the sets of cardboard protectors they arrived in and then retaped. These, along with the Section I stack, should be inserted and sealed in the self-addressed and stamped shipment bag(s). Before sealing the bag by stapling the open end, questionnaire administrators should complete the form requesting name, address, and number of completed questionnaires being returned. Payment at the rate of $.25 will be made for each completed questionnaire returned.

QUESTIONNAIRE ADMINISTRATOR'S FORM

Please print information requested and return with Section I of questionnaires and IBM answer sheets.

Name: _____
(Last) (First) (Middle)

Position: _____

School: _____

Address: _____
(Street, box, etc.)

_____
(City) (State)

Classes (or other groups) Administered the Questionnaire	Number of Students Administered The Questionnaire in Each Class

APPENDIX E

Letter to Questionnaire Administrator
(accompanying payment)

266/267

The Center For RESEARCH AND LEADERSHIP DEVELOPMENT IN
Vocational and Technical Education

THE OHIO STATE UNIVERSITY
1900 KENNY ROAD
COLUMBUS, OHIO 43210

June 6, 1968

Dear Questionnaire Administrator:

We wish to acknowledge our appreciation for helping to collect data on the "Career Development Patterns and Aspirations of Junior College Students."

The enclosed check is equivalent to 25¢ per completed questionnaire returned by you to The Center.

Thank you very kindly.

Sincerely yours,

A. P. Garbin
Project Co-Investigator

Derrald Vaughn
Research Associate

APG/DV:mmf

Enclosure

APPENDIX F

Self-Esteem Scale

SELF-ESTEEM SCALE

With the exception of one question, not used in the present study,[1] the Self-Esteem Scale is identical to that developed by Rosenberg (1965: 305-307).

Nine questions were collapsed into six Scale Items and are identified below. In the questionnaire the "positive" and "negative" oriented questions were presented alternatively to lessen the chances of response set. Positive responses indicate low self-esteem; they are noted below by asterisks. The Reproducibility Coefficient of this Guttman Scale is 88 percent.

The first Scale Item was contrived from the combined responses to the three questions listed below. If a respondent answered at least two out of three questions positively, he received a positive score for Scale Item I. Otherwise, he received a negative score.

(Item 36) I feel that I am a person of worth, at least on an equal plane with others.

0. ___ Strongly agree
1. ___ Agree
*2. ___ Disagree
*3. ___ Strongly disagree

(Item 37) I feel that I have a number of good qualities.

0. ___ Strongly agree
1. ___ Agree
*2. ___ Disagree
*3. ___ Strongly disagree

(Item 38) All in all, I am inclined to feel that I am a failure.

0. ___ Strongly agree
1. ___ Agree
2. ___ Disagree
3. ___ Strongly disagree

---

[1]The Office of Education suggested that for purposes of the present investigation, the following question be deleted:

At times, I think I am not good at all.

*1. ___ Strongly agree
*2. ___ Agree
3. ___ Disagree
4. ___ Strongly disagree

Scale Item II contained two self-esteem questions. A positive score was produced by answering at least one of the two questions positively.

(Item 39) I am able to do things as well as most other people.

0. ___ Strongly agree
1. ___ Agree
*2. ___ Disagree
*3. ___ Strongly disagree

(Item 40) I feel I do not have much to be proud of.

*0. ___ Strongly agree
*1. ___ Agree
2. ___ Disagree
3. ___ Strongly disagree

Scale Items III, IV, V, and VI contain only one question each. The questions are as follows:

(Item 41) I take a positive attitude toward myself.

0. ___ Strongly agree
1. ___ Agree
*2. ___ Disagree
*3. ___ Strongly disagree

(Item 42) On the whole, I am satisfied with myself.

0. ___ Strongly agree
1. ___ Agree
*2. ___ Disagree
*3. ___ Strongly disagree

(Item 43) I certainly feel useless at times.

*0. ___ Strongly agree
*1. ___ Agree
2. ___ Disagree
3. ___ Strongly disagree

(Item 44) I wish I could have more respect for myself.

*0. ___ Strongly agree
*1. ___ Agree
2. ___ Disagree
3. ___ Strongly disagree

APPENDIX G

Socioeconomic Status Index

SOCIOECONOMIC STATUS INDEX

Three items[1] in the questionnaire provided the information--income of the head of household, occupational prestige of the head of household, father's education--used in determining this index.

A score of 1 was assigned to incomes in the $0 to $6,999 range; a score of 2 was assigned to incomes between $7,000 and $10,999; and a score of 3 to incomes which were $11,000 or more. The occupational prestige of the head of household was rated 1 if it were under a mean score of 60, 2 for scores in the 60 to 79 range, and 3 for all prestige ratings of 80 or above. Education of the head of household was rated 7 for some grade school to completion of junior high, 2 for some high school or high school graduation, 3 for some college or college graduation, and 4 for some graduate or professional school.

---

[1] (Item 22) What do you estimate as the income of the head of the household in your parental family?

0. I have no idea.
1. less than $3,000
2. $3,000 to $4,999
3. $5,000 to $6,999
4. $7,000 to $8,999
5. $9,000 to $10,999
6. $11,000 to $12,999
7. $13,000 to $14,999
8. over $15,000

(Item J) What is (was, if retired or deceased) the usual occupation of the head of the household in your parental family, what is the job called, what kind of business or industry does he work in, and what does he do? For example, "carpenter, construction business, works on home building crew," "sales clerk, department store, waits on customers," "owner and president, large grocery chain of 15 stores, directs the business." The occupational prestige score was provided by Duncan (Reiss, 19:).

(Item 19) What was the last year of schooling completed by your father?

0. less than 7 years of school
1. completed junior high school (9 years of school)
2. some high school (did not graduate)
3. graduated from high school or equivalent
4. some college or university or other post-high school training
5. graduated from college or university
6. some graduate or professional school
7. completed graduate or professional school

Scores assigned to head of household's occupational prestige level and father's education were weighted by 2; income was weighted by 1. The derived scores ranged from a low of 5 (income under $7,000, occupational prestige score under 60, some grade school to completion of junior high) to a score of 17 (income of $11,000 or more, occupational prestige score of 80 or higher, some graduate or professional schooling). The weighted scores of the various social class groups are as follows:

SES Group	Weighted Score
I	16-17
II	14-15
III	11-13
IV	9-10
V	7-8
VI	5-6